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UNDERSTANDING THE COMPLEX DRIVERS OF INTRINSIC MOTIVATION FOR HEALTH WORKERS IN MALAWI

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UNDERSTANDING THE COMPLEX DRIVERS OF INTRINSIC MOTIVATION FOR HEALTH WORKERS IN MALAWI

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ACRONYMS

BLM	*Banja La Mtsogolo*
CHAM	Christian Health Association of Malawi
EHRP	Emergency Human Resource Programme
GOM	Government of Malawi
MOH	Ministry of Health
NGO	Nongovernmental Organization
NHA	National Health Assessment
SLA	Service Level Agreement
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

Background: Malawi suffers from an acute human resources for health crisis, and in 2003, it was estimated that fewer than 4,000 doctors, nurses, and midwives were serving a population of approximately 12 million (Manafa et al., 2009). In response, the Government of Malawi implemented an Emergency Human Resources Programme (EHRP) to increase the number of health workers employed in the Ministry of Health and Christian Health Association of Malawi (CHAM) sectors. On many levels, the EHRP was a success and across 11 priority cadres, the total number of health workers increased by 53 percent, from 5,453 in 2004 to 8,369 in 2009.

However, the EHRP relied heavily on financial incentives including salary top-ups and did not systematically employ nonfinancial incentives in health facilities. Increasingly, human resource management efforts recognize that the intrinsic motivation of health workers is associated with higher levels of retention and service delivery performance. However, there are few nationally representative studies that measure and determine the predictors of intrinsic motivation across the entire health system, including for public, private for-profit, and faith-based health workers.

Methods: The USAID-funded Health Systems 20/20 project conducted a nationally representative study in Malawi and employed both qualitative and quantitative data collection methods to assess statistically significant drivers of intrinsic motivation. 602 health workers of every cadre were interviewed, and 612 randomly sampled clients were interviewed in Malawi to match client perceptions of health care services with health worker motivation levels. Every district in Malawi was sampled and included in data collection. In order to account for the variation in the number of health facilities included in the sample across sectors and geographic clusters, sample weights were computed.

Results and Conclusions: Across sectors and cadres, health workers' overall level of satisfaction with absolute levels of compensation was not significantly associated with their overall level of intrinsic motivation. The strongest drivers of intrinsic motivation are not financial and include professional development opportunities, facility recognition, and opportunities for promotion. Contrary to anecdote, public sector workers demonstrated the highest levels of intrinsic motivation. There are fewer statistical differences than expected in intrinsic motivation and job satisfaction for health workers in CHAM facilities with or without a Service Level Agreement (SLA), but there is a slightly stronger relationship between health workers' overall level of intrinsic motivation and their overall level of satisfaction with their job in CHAM facilities with an SLA than in CHAM facilities without this contracting mechanism. Analyses indicate weak relationships between clients' overall satisfaction with their provider and health workers' perceptions about their jobs.

Results show that nonfinancial incentives are statistically associated with increases in intrinsic motivation and job satisfaction for health workers. Motivation-based incentives may be more effective in promoting job satisfaction and retention than financial incentives. Client perceptions of care and satisfaction with services are associated with variables other than health worker motivation levels. Study findings present a number of practical and sustainable opportunities to increase the intrinsic motivation and job satisfaction of health workers across Malawi's health system. Nonfinancial incentives are an important tool to incorporate into the Programme of Work II and can ultimately complement and augment efforts to improve retention and production of health workers through financial incentives

1. INTRODUCTION

Africa's insufficient health workforce is a major constraint in attaining the Millennium Development Goals for reducing poverty and disease (Manafa et al., 2009). The World Health Organization's (WHO) World Health Report 2006 shows that countries with fewer than 2.3 doctors, nurses, and midwives per 1,000 people fail to achieve an 80 percent coverage rate of measles immunization and the presence of skilled birth attendants during childbirth (WHO, 2006a).

Malawi, a southeast African country with a population of more than 15 million, falls far below this ratio (WHO, 2011). In 2003, it was estimated that fewer than 4,000 doctors, nurses and midwives were serving a population of approximately 12 million (Manafa et al., 2009). Given that health workers are the foundation of health service delivery (Serneels et al., 2010), the health worker shortage in Malawi has grave implications for the quality of health care delivered across the country's entire health system.

Under Malawi's health sector Programme of Work I initiated in 2004, Malawi implemented an Emergency Human Resource Programme (EHRP) to respond to an acute crisis in the number of health workers employed in the Ministry of Health (MOH) and Christian Health Association of Malawi (CHAM) sectors. The EHRP primarily sought to increase the production of health workers by utilizing financial incentives to improve retention and deploy health workers to remote areas, as well as substantially increase opportunities for pre-service education. In 2010, the U.K. Department for International Development (DFID) funded an evaluation of the EHRP through a contractor, Management Sciences for Health, and released a notable evaluation report. Across 11 priority cadres, the total number of health workers increased by 53 percent, from 5,453 in 2004 to 8,369 in 2009. By 2009, $34.1 million of primarily donor funds were spent to fund financial incentive payments to 8,369 public sector and CHAM health workers in select facilities (O'Neil et al., 2010).

The evaluators concluded that donor willingness to support a 52 percent salary top-up for certain health workers and the Government of Malawi's (GOM) decision to allow different pay scales for health workers as compared to other civil servants were integral to the increased numbers of health workers in the EHRP period. While the EHRP did utilize nonfinancial incentives to bolster health worker numbers, the program prioritized the use of financial incentives through salary top-ups. The evaluators also provided valuable qualitative data about health worker perceptions of the impact of financial incentives through focus group discussions with 139 health workers. Qualitative findings strongly suggested that financial top-ups were a crucial reason that health workers returned to service at CHAM or public sector facilities. An additional scheme employed during the EHRP called Locum allowed certain health workers to receive additional salary benefits to fill temporary vacancies in facilities.

While the EHRP was undoubtedly a strong success in dramatically improving the numbers of health workers and strengthening pre-service education in Malawi, continued salary top-ups are largely donor funding dependent and could suffer from any reductions in donor support. Clearly, the sustainability of sector-wide financial incentives is of paramount importance for the current Programme of Work 11. Additionally, the EHRP and its evaluation did not focus on the role of intrinsic motivation and job satisfaction in driving retention, quality, or client perspectives. Given the emergency nature of the EHRP response, the role of intrinsic motivation and job satisfaction likely appeared as less urgent as producing new health workers and re-recruiting former health workers.

However, the U.S. President's Emergency Plan for AIDS Relief's (PEPFAR) Partnership Framework identifies training, supervision, and better working conditions as important nonfinancial ways to improve health worker retention in Malawi. A growing body of research supports this framework by showing

that nonfinancial incentives - training opportunities, career development prospects, and improved working conditions - can positively impact health worker motivation and retention (Hays et al., 1997; Kamien, 1998; Peters et al., 2002; and Shields, 2004). The literature also shows that the intrinsic motivation of health workers - the desire to do something for its own sake - can have a strong, positive effect on job retention (Lindelow and Serneels, 2006; Besley and Ghatak, 2005; Dixit, 2002; Franco et al., 2002; Francois and Vlassopoulos, 2008; and Prendergast, 2008). Although this literature helps us to understand the factors that impact health worker retention and motivation in the developing world context, it pays little attention to whether these factors have a differential impact across health sectors (public, private, and faith based-sectors). This literature also largely ignores the role that clients' satisfaction with their health services plays on health worker motivation and retention. Given the diversity of health care providers in Malawi, examining the role that nonfinancial incentives, intrinsic motivation, and client satisfaction has on health worker job satisfaction and retention across sectors is important for developing ways to improve the quality of care delivered across the country.

1.1 PROVISION OF HEALTH CARE IN MALAWI

The MOH is the main health provider in Malawi, providing approximately 60 percent of all health services. CHAM is responsible for the provision of about 37 percent of health services. The private for-profit health sector, although expanding, provides less than 3 percent of health services in Malawi. Other health care providers in Malawi include the private not-for-profit sectors, local government, the military and police health services, and small clinics offering care for company employees and their families (Manafa et al., 2009).

1.1.1 PUBLIC SECTOR IN MALAWI

The main health service provider in Malawi is the MOH, which provides approximately 60 percent of all health services. The majority of health workers in Malawi are mid-level providers, or cadres of health workers who have shorter training times and who provide services that were originally provided by specialists (Ogenna et al., 2009). Malawi's public health system faces countless challenges - from severe staff shortages to limited leadership in the MOH - and the GOM must clear significant hurdles in order to achieve the mission of Vision 2020, "to improve the health status of all Malawians through the provision of effective, efficient and safe health care" (GOM, 2010). The GOM signed the Abuja Declaration in 2000 in order to show its commitment to overcoming the country's health system challenges. By signing the Declaration, the Malawian government made a promise to allocate a minimum of 15 percent of its national budget to the health sector. In 2008, however, the government's contribution only reached 14 percent. Inadequate domestic financial resources devoted to the health sector are a key factor undermining Malawi's public health system.

1.1.2 PRIVATE-FOR PROFIT SECTOR IN MALAWI

The private for-profit health sector currently provides less than 3 percent of health services in Malawi. One of the reasons that this sector plays a small role in health care delivery is because current policies for increased private sector participation are limited. This is the case even though Malawi's 2007 National Health Assessment (NHA) report found employers' (private firms and parastatals) contributions to total health expenditures to be too low, that employers' contribution to health care needs to increase, and that the GOM should investigate "the feasibility and viability of establishing mandatory health insurance for the formal sector, and installing on-site health facilities for employees and dependents" (GOM, 2007).

Even though the private for-profit sector in Malawi is small, private health providers make an important contribution to health care delivery. Marie Stopes International, which has been operating as Banja La Mtsogolo (BLM) since 1987, presently runs 31 "static" clinics and has 364 community outreach sites

throughout the country. In June 2008, BLM launched the BlueStar social franchise. BLM conducted a mapping exercise to locate small, private clinics; assessed 86 potential franchisees; and selected 60 to become BlueStar network members. In March 2010, BlueStar clinics had 21,566 client visits, of which 1,811 (8 percent) were for family planning (Smith, 2010). A client exit survey of 117 clients at 24 BlueStar clinics, commissioned by Marie Stopes International in November 2009, found that 50 percent of clients live below the average national household income and their median age is 28 years (Smith et al., 2010). In addition, the number of non-networked commercial providers in Malawi is thought to be growing and in 2012, the USAID-funded Strengthening Health Outcomes through the Private Sector (SHOPS) project will be mapping all private for-profit health facilities in the country to help quantify this sector.

1.1.3 CHAM SECTOR IN MALAWI

CHAM is responsible for the provision of about 37 percent of all health services in Malawi. Two types of CHAM facilities provide health services in Malawi: CHAM facilities with a Service Level Agreement (SLA) and those without an SLA. Since 2003, the MOH has utilized SLAs as a contracting mechanism between local government, district health offices, and faith-based facilities in the CHAM network, to improve equity in access to health services in areas underserved by the MOH. The SLA mechanism improves access by having the district health office pay CHAM the costs of services rendered to patients (e.g., those typically covered by user fees), thereby removing a financial barrier that prevents poor patients from accessing health care services. As of 2009, 60 of the 172 CHAM facilities in Malawi signed SLAs with the MOH (Norwegian Church AID, 2010). However, there are enormous challenges associated with the implementation of SLAs including disagreements over costs, reimbursement practices, and standardization across districts.

The CHAM facilities in Malawi not only provide health services, but also train health workers to staff public and private facilities throughout the country. CHAM has ten affiliated training institutes that provide an estimated 40 percent of overall health worker pre-service training. CHAM's nursing and midwifery pre-service training produces 77 percent of all nursing personnel in Malawi (Pearl et al., 2009a). An estimated 600 health workers - including laboratory technicians, nurses, midwives and counselors - enroll annually in CHAM's training institutions. In 2009, over 500 health professionals graduated from these training institutes (CHAM, 2009).

CHAM also holds a range of in-service trainings. Several in-service trainings are offered in collaboration with international nongovernmental organizations (NGOs) or educational institutions such as Management Sciences for Health, Japan International Cooperation Agency, and several Norwegian colleges. CHAM estimates that approximately 200 employees from its health facilities participate in these trainings annually (Pearl et al., 2009b).

CHAM facilities with and without an SLA provide health care and training services that might not otherwise be provided by the overburdened and underfinanced MOH.

1.2 LITERATURE REVIEW

1.2.1 FACTORS IMPACTING THE MOTIVATION AND RETENTION OF HEALTH WORKERS IN DEVELOPING COUNTRIES

A growing body of research has focused on the role that financial and nonfinancial incentives have on health worker motivation and retention. Financial incentives that have been found to have an impact on health worker motivation and retention include salaries and housing and transportation allowances. Nonfinancial incentives - incentives that do not involve a direct transfer of monetary values or equivalents (Adams and Hicks, 2000) - that impact health worker motivation and retention include

career development, continuing education opportunities, and personal recognition and appreciation from managers and colleagues (Willis-Shattuck et al., 2008).

Although 90 percent of studies included in a systematic review of the literature on the factors that impact the motivation and retention of health workers discuss the value of using financial incentives to motivate and retain health workers, their impact was found to be limited when used in isolation (Kotzee and Couper, 2006; Dieleman et al., 2006; Dieleman et al., 2003; Franco et al., 2004; Mathauer and Imhoff, 2006). Allowances were found to have a limited effect on retaining health workers in rural areas in South Africa (Reid, 2004) as well as in Cameroon and Zimbabwe, where incentives were perceived as being unequally distributed between health workers (Awases et al., 2003). Since financial incentives do not solve the problem of low motivation, researchers have recommended that financial incentives be combined with nonfinancial incentives to strengthen health worker motivation and retention.

Six main nonfinancial incentives are identified in the literature to impact health worker motivation and retention in developing countries. These nonfinancial incentives are career development opportunities; continuing education; a good, physical work environment; the availability of resources to perform a job; a positive working relationship with management; and personal recognition and appreciation from colleagues (Willis-Shattuck et al., 2008). The same systematic review of the health worker literature finds career development and a good working relationship with management to be the most commonly identified factors to improve health worker motivation and retention (85 percent and 80 percent respectively). Recognition and appreciation from managers or colleagues in the community are also an important nonfinancial incentive to motivate and retain health workers (Manongi et al., 2006). Nonfinancial incentives not only strengthen health worker motivation and retention in cases where these health professionals have financial security, but also in cases where they lack financial incentives and have poor work conditions (Stilwell, 2001).

The concept of intrinsic motivation has received some additional focus recently since the publication of Daniel Pink's popular business book entitled Drive. Pink posits that intrinsic motivators including enjoyment of work, genuine achievement, and personal growth drive high-quality professional services (including in health) more so than extrinsic motivators like salaries or bonuses (Pink, 2009). This bestseller in the United States suggests that increases in individual autonomy, mastery, and purpose are far more effective in motivating workers across the world than traditional financial incentives.

Although there is a significant body of research that identifies the factors that impact the motivation and retention of health workers in developing countries, these studies do not examine whether these factors vary across types of health workers. Most studies sample health workers as a whole (Willis-Shattuck et al., 2008) and therefore do not allow for comparisons across health sectors. This study fills this important gap in the literature by investigating the drivers of intrinsic motivation and retention for health workers across the three major health sectors - public, private for-profit, and faith-based sectors - in Malawi.

1.2.2 I.2.2 RELATIONSHIP BETWEEN CLIENT SATISFACTION AND HEALTH WORKER MOTIVATION AND JOB SATISFACTION

Existing research has investigated client-health worker interactions and how this relationship impacts various outcomes, including provider productivity and provider responsiveness to patients (WHO, 2006b). However, little research has investigated how clients' perceptions about their providers and the quality of care that they receive impact health worker motivation and job satisfaction. A 2006 study conducted in Benin and Kenya found preliminary evidence to support the claim that patient appreciation of health workers influences their level of job satisfaction (Mathauer and Imhoff, 2006). However, this research was based on a small sample of health workers (63 in Benin and 37 in Kenya respectively) and did not test this claim quantitatively or with a representative sample. This study will fill this important

gap in the research by using a rigorous mixed-methodology to investigate whether clients' perceptions about the quality of the health services that they receive influence health worker motivation and job satisfaction in Malawi.

1.3 RESEARCH OBJECTIVES

Health workers are an essential component of the health care delivery system, making their numbers, skills, and level of commitment critical to the delivery of quality health care (Serneels et al., 2010). A growing body of research has identified the drivers of health worker motivation and retention in developing countries. However, little is known about the whether these factors vary across health sectors. This study will fill this gap in the literature by assessing 1) the factors that influence health worker motivation and retention across the public, private for-profit, and faith-based sectors and 2) whether clients' perceptions about the quality of their health services influence health worker motivation and retention. A mixed-methods approach will be used to answer these research questions.

The main objectives of this study are therefore as follows:

- To determine the levels of intrinsic motivation, retention, and performance for health workers in public, private for-profit, and faith-based (CHAM) facilities in Malawi;
- To determine the drivers of intrinsic motivation for health workers in the public, private for-profit, and faith-based (CHAM) sectors; and
- To determine whether client perceptions of the quality of their health services impact health worker motivation and job satisfaction.

2. STUDY METHODOLOGY

2.1 STUDY AREA

The study includes a nationally representative sample of health workers from public, private for-profit, and CHAM facilities across all 27 districts in Malawi.

2.2 SAMPLING DESIGN

Health facilities from all 27 districts in Malawi are included in the sample. Health facilities from the public, private for-profit, and faith-based sectors are sampled using an equal-probability, systematic sampling design. The sample is allocated to each district in proportion to the number of facilities in each sector. Fifteen public sector facilities are selected with certainty to ensure the inclusion of very large health facilities. This selection is done on the basis of size distribution in each district. Samples are selected independently in each district without any district collapsing.

A total of 163 health facilities are included in the study sample. Table 1 shows the number and type of health facilities selected by district.

TABLE 1. NUMBER AND TYPE OF HEALTH FACILITIES SELECTED FOR STUDY

District	Universe of sites	Total # of sites selected	# of public facilities	# of private for-profit facilities	# of CHAM facilities
Balaka	14	3	2	0	1
Blantyre	36	9	5	3	1
Chikwawa	24	6	5	0	1
Chiradzulu	14	3	2	0	1
Chitipa	9	2	1	0	1
Dedza	35	8	6	0	2
Dowa	24	6	4	1	1
Karonga	17	4	3	0	1
Kasungu	25	6	5	1	0
Lilongwe	66	16	9	4	3
Machinga	22	5	3	0	2
Mangochi	46	11	6	2	3
Mchinji	18	4	3	0	1
Mulanje	24	6	5	0	1
Mwanza	4	1	1	0	0
Mzimba	52	12	8	1	3
Neno	11	3	2	0	1
Nkhatabay	28	7	6	1	0
Nkhotakota	22	5	3	1	1
Nsanje	23	6	5	0	1
Ntcheu	36	9	5	1	3
Ntchisi	13	3	2	0	1
Phalombe	14	3	2	0	1
Rumphi	24	6	4	0	2
Salmia	17	4	2	1	1
Thyolo	25	6	4	0	2
Zomba	36	9	5	1	3
Total	679	163	108	17	38

The data collection team in Malawi did not visit every health facility included in the original sample because: health facilities were closed; there was a lack of road access to some facilities; and some facility managers refused to allow data collectors to interview providers and/or clients. Table 2 shows the number and type of health facilities included in the final sample by district.

TABLE 2. NUMBER AND TYPE OF HEALTH FACILITIES INCLUDED IN FINAL STUDY

District	Total # of site included	# of public facilities	# of private for-profit facilities	# of CHAM facilities
Balaka	3	2	0	1
Blantyre	8	5	2	1
Chikwawa	6	5	0	1
Chiradzulu	3	2	0	1
Chitipa	1	1	0	0
Dedza	8	6	0	2
Dowa	6	4	1	1
Karonga	4	3	0	1
Kasungu	5	4	1	0
Lilongwe	15	8	4	3
Machinga	5	3	0	2
Mangochi	10	5	2	3
Mchinji	4	3	0	1
Mulanje	6	5	0	1
Mwanza	1	1	0	0
Mzimba	11	7	1	3
Neno	3	2	0	1
Nkhatabay	6	5	1	0
Nkhotakota	5	3	1	1
Nsanje	6	5	0	1
Ntcheu	7	4	0	3
Ntchisi	3	2	0	1
Phalombe	2	2	0	0
Rumphi	5	4	0	1
Salmia	3	2	0	1
Thyolo	4	3	0	1
Zomba	9	5	1	3
Total	149	101	14	34

Up to 4 health workers and up to 5 randomly selected clients were interviewed per facility, allowing for a maximum of 640 health workers and 800 clients to be selected for participation. A total of 602 health workers and 612 clients across 149 health facilities were included in the final sample. Table 3 shows the total number of health workers and clients interviewed by health sector.

TABLE 3. NUMBER OF HEALTH WORKERS AND CLIENTS INTERVIEWED BY HEALTH SECTOR

	# in public facilities	# in private for-profit facilities	# in CHAM facilities		Total
			With SLA	**Without SLA**	
Health Workers	420	47	17	118	602
Clients	436	53	21	102	612

2.3 SELECTION CRITERIA FOR INTERVIEWS

Table 4 identifies the inclusion and exclusion parameters for study participation by clients. The clients who fulfilled the inclusion criteria were asked both the closed- and open-ended interview questions.

TABLE 4. INCLUSION AND EXCLUSION CRITERIA FOR DATA COLLECTION FOR CLIENTS

	Include	Exclude
Client Exit Interviews	Clients attending the health care facility that fulfill all of the following inclusion criteria: • Age 18 or above • Receive health care services or accompany a child for health care services on the day of data collection • Provides verbal informed consent to participate in the interview Up to 5 clients visiting a facility over a three-hour period will be approached for participation in the study.	Data collectors will exclude: • Clients below the age of 18 • Clients who do not receive health care services or accompany a child for health care services on the day of data collection • Clients who do not consent to being interviewed

2.4 DATA COLLECTION INSTRUMENTS AND APPROACH

2.4.1 DATA COLLECTION INSTRUMENTS

Four instruments were used in this study: a closed-ended client interview, an open-ended client interview, a closed-ended health worker interview, and an open-ended health worker interview. The closed-ended instruments allowed the research team to broadly assess client and health worker perceptions about their jobs and the quality of care that they received respectively. The open-ended instruments allowed the research team to validate and understand the nuances of the responses to the closed-ended questions.

The client interviews aimed to understand clients' perceptions of the quality of their health care as well as their overall level of satisfaction with their health care-seeking experience. This instrument included questions about clients' perceptions about the quality of treatment received, their level of confidence in their providers, and their overall level of comfort in the health facility where they sought treatment.

The health worker interviews aimed to understand the job satisfaction, motivation, and retention levels of health workers in the public, private for-profit, and faith-based health sectors in Malawi. Ultimately, the health worker interviews were conducted in order to generate evidence-based recommendations for strengthening human resource motivation and retention across Malawi's health system.

All four interview types were used in the final stage of the analysis to ascertain whether client perceptions about the quality of health care that they received impacts health worker job satisfaction, motivation, and retention across sectors in Malawi.

2.4.2 DATA COLLECTION APPROACH

Two teams of four data collectors and two supervisors were hired and instructed to begin data collection at each site by interviewing the facility manager in order to familiarize themselves with the aims of the study before proceeding. The facility manager then granted permission to the data collectors to interview four health workers and up to five randomly selected clients. The health worker instruments were administered in English, as facility managers usually use English in their day-to-day operations. The client instruments were translated into local dialect so that the questions would be understood by the respondents.

2.5 DATA COLLECTION PROCEDURES

In October 2010, eight data collectors and two data collection supervisors from the Malawian research firm Management International were trained on study procedures at a two-day workshop. Management International implemented all data collection for this study under the guidance of the Health Systems 20/20 project. The training covered the following topics:

- Overall research questions and aims of the study;
- Study population and the selection of study participants (both health workers and clients) for inclusion in the study;
- Data collection methods including questionnaire administration and the capturing of open-ended responses during qualitative interviewing;
- Procedures for introduction at health facilities and practicing how to briefly present the aims of the study to facility managers;
- Review of informed consent procedures;
- Review of all instruments for clarity and comprehension with modifications made as needed;
- Review of translation of client instrument into local language;
- Arrangements to ensure the confidentiality of data; and
- Practicing and role-plays on administering questionnaires and qualitative interviewing with feedback and review from Health Systems 20/20 researchers.

Following the training, the team pre-tested the instruments and study protocols at two health facilities in Lilongwe: Likuni (CHAM) and Kawale Health Center (public). The purpose of the pre-test was 1) to allow Health Systems 20/20 researchers to observe data collectors interacting with health workers and clients in order to offer constructive feedback and suggestions about questionnaire administration; skills in qualitative interviewing; body language; and protection of respondent confidentiality and privacy and 2) to give data collectors the opportunity to provide the research team with feedback about any language, wording, or questions that respondents found confusing or unclear. Minor changes in language were made on both sets of instruments in preparation for the launch of the study.

Table 4 identifies inclusion and exclusion parameters for client respondents. Data collectors were instructed to interview up to four health workers per facility from as many different cadres as possible, as well as up five randomly exiting clients on the day of data collection. The data collector teams introduced themselves upon to the facility manager and upon entering a facility and whenever possible, interviewed the facility manager. On average, data collectors visited two facilities per day and spent approximately three hours at each facility.

2.6 DATA ENTRY AND ANALYSIS APPROACH

Management International conducted both the quantitative and qualitative data entry. The procedures for quantitative data entry included double data entry in Microsoft Excel and a 5 percent spot-check for errors. The qualitative data entry involved a verbatim transcription of the data in Microsoft Word. All data procedures were discussed and solidified with Health Systems 20/20.

Health Systems 20/20 conducted all data analyses. The Health Systems 20/20 data analyst spot-checked and cleaned the data as appropriate. Quantitative data analyses were then conducted using STATA 10 Statistical Software. Analyses were conducted in two ways: 1) analyzing client and health worker interviews separately and 2) analyzing client and health worker interviews together. Descriptive and bivariate analyses were used to meet the study objectives. Most data analyses were stratified by health sector in order to make comparisons between health workers and clients across public, private for-profit, and CHAM (with and without an SLA) facilities.

In order to account for the variation in the number of health facilities included in the sample across sectors and geographic clusters (districts), sample weights were computed. All statistical results were adjusted according to these sample weights.

The open-ended health worker and client interviews were transcribed and disaggregated by health sector. The qualitative data was then analyzed using emergent coding.

2.7 PARTICIPATORY RESEARCH CONSULTATION

The health worker and client instruments were reviewed by USAID/Malawi. Minor modifications were also made to the wording of both instruments as a result of data collector feedback on language clarify and ease of instrument facilitation.

2.8 STUDY LIMITATIONS

Because the study sample includes limited opportunity to sample by cadre of health workers, we are not able to conduct cadre-level analyses. We can therefore only make generalizations about health workers as a whole in Malawi. Additionally, even though we are able to conduct sector-level analyses, only CHAM facilities were included as part of the faith-based sector. We therefore cannot generalize the findings from the CHAM sector to the entire faith-based sector – which includes CHAM and Muslim facilities – in Malawi. Finally, even though our study provides insight into the drivers of intrinsic motivation, job satisfaction, and retention for health workers, we do not attempt to link these drivers to improved job performance and health outcomes in Malawi. We do, however, make the assumption that these relationships exist based on previous research conducted on this topic.

2.9 ETHICAL CONSIDERATIONS

The study protocol, instruments, and other related research materials (i.e., consent forms) were reviewed and approved by the Abt Associates Institutional Review Board. The MOH Human Resources for Health Technical Working Group also approved the study design and objectives. Verbal informed consent was also obtained from all participants included in the study.

3. HEALTH WORKING FINDINGS

This section presents findings from both the closed-ended and open-ended health worker interviews. These results are instructive both in understanding the primary drivers of health worker job satisfaction, motivation, and retention and in identifying how these drivers vary across health sectors in Malawi.

3.1 DEMOGRAPHIC PROFILE OF HEALTH WORKERS

Figures 1-3 show the demographic profiles – age, gender, and experience in the health care field – of the health workers included in the study. The demographic data are combined for all health workers included in the sample as well as stratified by sector. The CHAM sector is further disaggregated into facilities with an SLA and those without this contracting mechanism.

Results show that most health workers are in their 30s (ranging from 34 percent in CHAM facilities without an SLA to 50 percent in the private for-profit sector). This is the case across all three health sectors in Malawi. The results also show that a majority of health workers in the private (58 percent male and 42 percent female) and public sectors (65 percent male and 35 percent female) are male. The results indicate a more equal distribution of male and female health workers in CHAM facilities with and without an SLA (48 percent male and 52 percent female in both types of CHAM facilities).

FIGURE 1. AGE RANGE OF HEALTH WORKERS (%) BY SECTOR

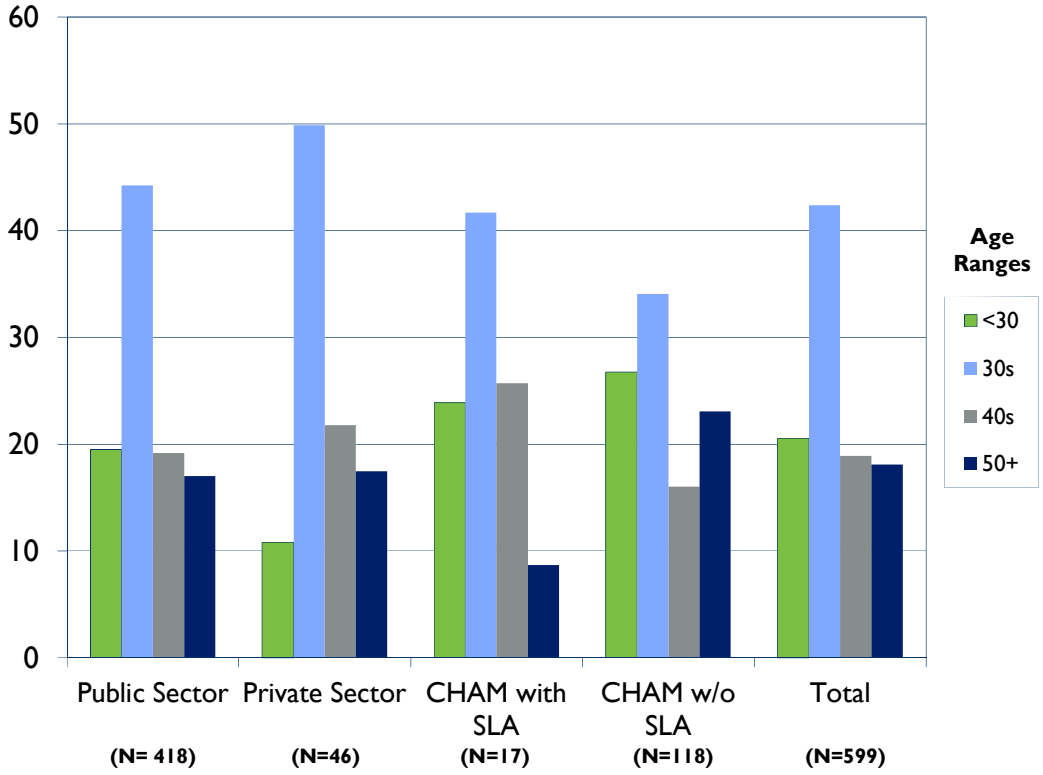
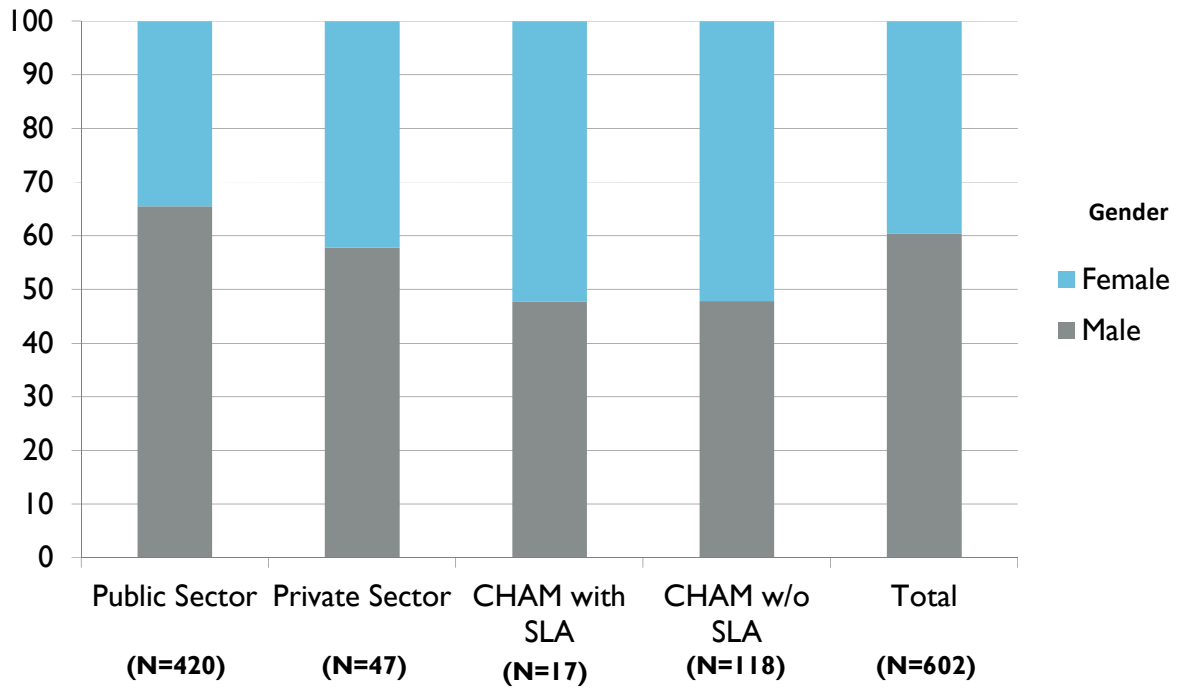


FIGURE 2. GENDER OF HEALTH WORKERS (%) BY SECTOR



3.1.1 EXPERIENCE IN THE HEALTH CARE FIELD

The analysis also reveals that health workers in Malawi have significant experience working in their facility and in the health care field overall (Table 5). On average, health workers in Malawi have been in their current position for five years and have worked in the health care field for 11 years. Private for-profit sector health workers have been in the health care field the longest, an average of 12.79 years, while health workers in CHAM facilities with an SLA have worked in health care for the shortest amount of time, an average of 9.22 years.

TABLE 5. PRIOR EXPERIENCE IN HEALTH BY SECTOR

Prior Experience in Health (Mean)	Public Sector (n=420)	Private Sector (n=47)	CHAM w SLA (n=17)	CHAM w/out SLA (n=118)
# of Years in Current Position	4.67 (4.19-5.15)	5.96 (4.57-7.34)	5.58 (3.52-7.65)	5.42 (4.48-6.36)
# of Years in Health Care	11.70 (10.65-12.79)	12.79 (10.21-15.37)	9.22 (6.27-12.16)	11.42 (9.51-13.34)

**Confidence intervals (CI) are in parentheses.

** The "N" in parentheses indicates the sample size for each estimate.

3.2 I HEALTH WORKERS IN THE PUBLIC SECTOR

3.2.1 DEMOGRAPHIC PROFILE OF HEALTH WORKERS IN THE PUBLIC SECTOR

Forty-five percent of health workers in public facilities are in their 30s. A majority of health workers (65 percent) in public facilities are male. In comparison to all other sectors, public facilities have the highest male to female staff ratio.

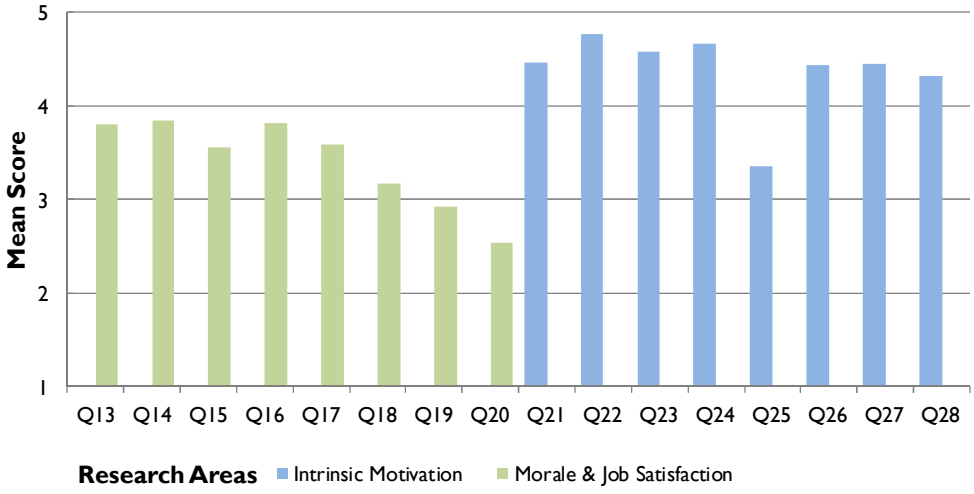
Health workers in the public sector have worked in health care for an average of 11.7 years. This ranks public sector facilities second to private for-profit facilities in having the highest retention rate in the health care field. Although health workers in the public sector have been in the health care field for the second longest amount of time, they have been in their current position for the shortest amount of time, an average of 4.67 years.

3.2.2 LEVELS OF JOB SATISFACTION AND INTRINSIC MOTIVATION OF HEALTH WORKERS IN THE PUBLIC SECTOR

Figure 3 shows the mean levels of health worker motivation and job satisfaction in the public sector. Eight questions (Q13-Q20) measure health worker motivation and seven questions (Q21-Q28) measure health worker job satisfaction on the closed-ended health worker instrument. These questions were scored on a 1 to 5 scale, with 1 indicating strong disagreement (no motivation or job satisfaction) and 5 indicating strong agreement (strong motivation or job satisfaction).

Mean level scores of job satisfaction in public facilities range from 2.53 to 3.84, indicating that health workers are somewhat to just satisfied with their position. Mean level scores of intrinsic motivation in public facilities are higher, ranging from 3.35 to 4.76, indicating that health workers are motivated to highly motivated to fulfill their jobs. The highest average rating was for question 22 (Q22) (mean = 4.76), suggesting that health workers' intrinsic motivation is driven by the importance they place on their work.

FIGURE 3. MEAN LEVEL OF HEALTH WORKER JOB SATISFACTION AND MOTIVATION IN THE PUBLIC SECTOR



Questions Relating Morale & Job Satisfaction (Q13-20) and Intrinsic Motivation (Q21-Q28)
(N=420)

core

3.2.3 DEMOGRAPHIC PROFILE OF HEALTH WORKERS IN THE CHAM SECTOR

More than one-third (35 percent) of health workers in CHAM facilities are in their 30s. Fifty-two percent of health workers in CHAM facilities are female. This represents the highest percentage of females working in the health care field across sectors in Malawi given that 42 and 35 percent of health workers in the private for-profit and public sectors respectively are female.

Health workers in CHAM facilities have also been in their current position for an average of five years. This is consistent with the amount of time health workers in the public and private sectors in Malawi have been in their current position. Health workers in the CHAM sector have also worked in health care for an average of 11 years, indicating that they have substantial experience in the health care field.

3.3.2. Levels of Job Satisfaction and Intrinsic Motivation of Health Workers in the CHAM Sector

Figures 4 and 5 show the mean levels of health worker motivation and job satisfaction in the CHAM sector. Similar to the analyses conducted among health workers in public sector facilities, these results show the mean value for the eight questions (Q13-Q20) that measure health worker motivation and the seven questions (Q21-Q28) that measure health worker job satisfaction included in the closed-ended health worker instrument. These questions are scored on the same 1 to 5 scale, with 1 indicating strong disagreement (no motivation or job satisfaction) and 5 indicating strong agreement (strong motivation or job satisfaction).

Figure 4 shows that the health workers' average ratings for questions related to their satisfaction with their jobs range from 2.5 to 3.9, indicating that health workers in CHAM facilities are somewhat satisfied to just satisfied with their jobs. The results also indicate that there is no substantive difference between health workers' average ratings on job satisfaction across CHAM facilities with and without an SLA.

FIGURE 4. MEAN LEVEL OF HEALTH WORKER JOB SATISFACTION IN THE CHAM SECTOR

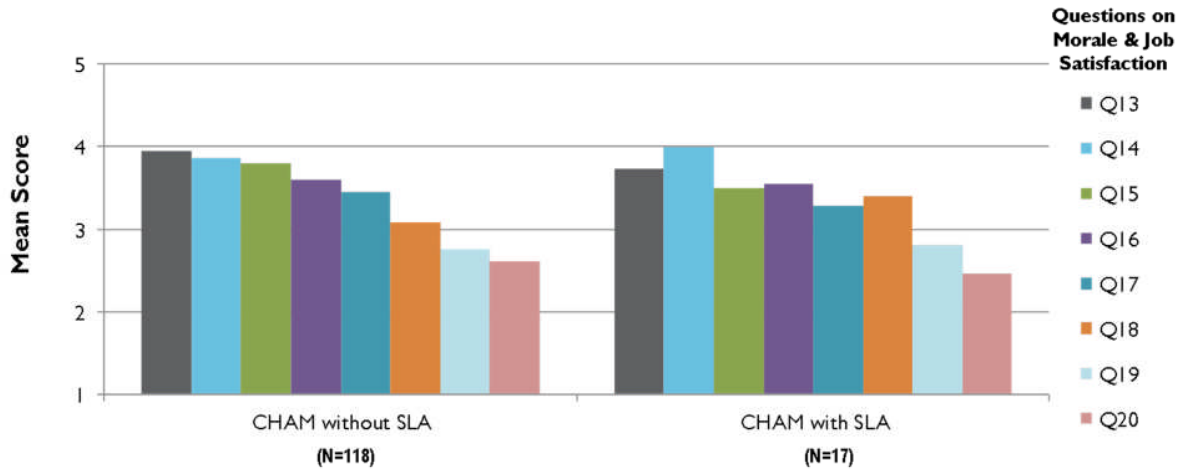
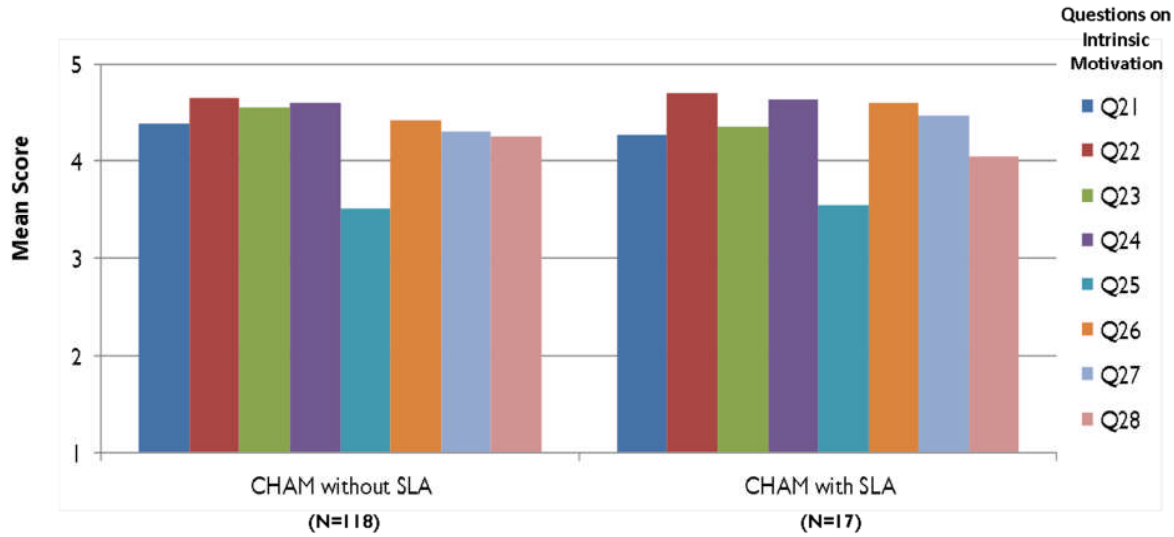


Figure 5 shows that the mean rating scores for the health worker motivation questions range from 3.5 to 4.7, indicating that health workers in CHAM facilities are motivated to highly motivated to fulfill their work duties. Again, there is no substantive difference between the health workers' average ratings on intrinsic motivation across CHAM facilities with and without an SLA; they all report being motivated to do their job.

FIGURE 5. MEAN LEVEL OF HEALTH WORKER MOTIVATION IN THE CHAM SECTOR

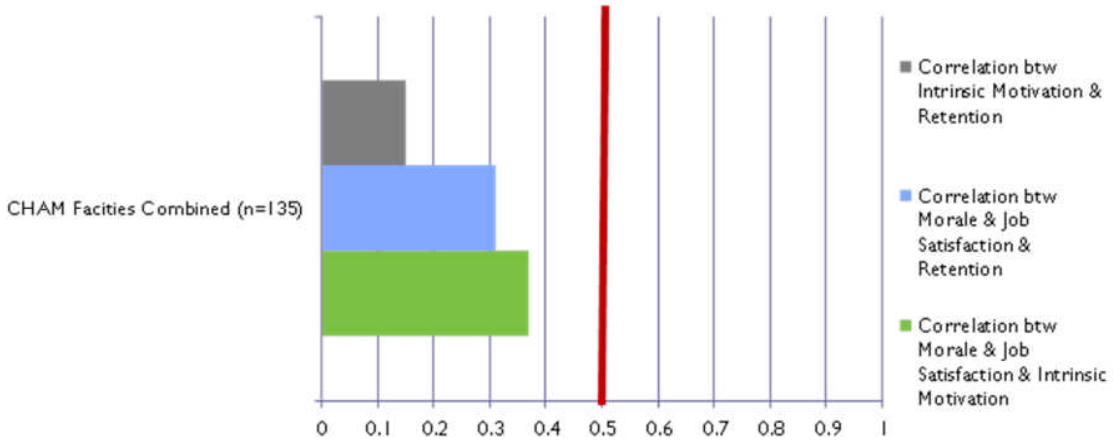


3.2.4 RELATIONSHIP BETWEEN JOB SATISFACTION, MOTIVATION, AND RETENTION IN THE CHAM SECTOR

Figure 6 shows the correlation between health worker motivation, job satisfaction, and job retention in the CHAM sector. Composite indices of overall job satisfaction (combining Q13-Q20), overall motivation (Q21-Q28), and overall retention (Q39-Q41) were generated to conduct these analyses.

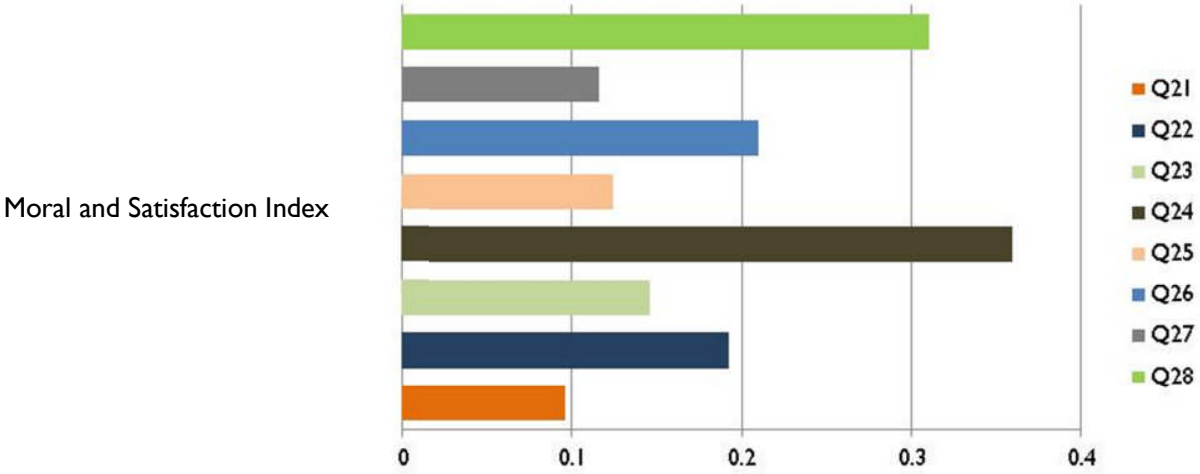
Results show that there is a much stronger relationship between health workers' overall level of job satisfaction and the likelihood that they will retain their job (.31) than between health workers' overall level of intrinsic motivation and their decision to retain employment (.13). Health workers' overall level of intrinsic motivation does, however, have a relatively strong impact on their level of job satisfaction (.37).

FIGURE 6.CORRELATION BETWEEN HEALTH WORKER JOB SATISFACTION, MOTIVATION, AND RETENTION IN THE CHAM SECTOR



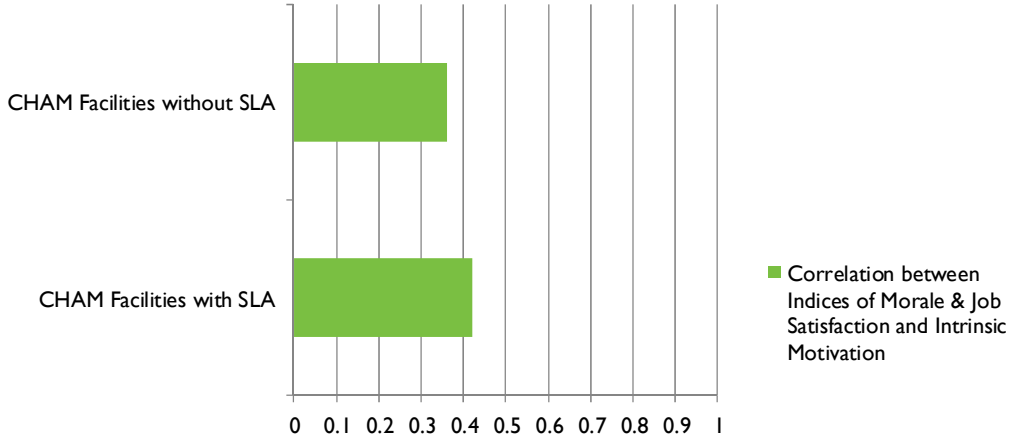
Additional empirical analyses show that the relatively strong relationship between CHAM sector health workers' overall level of intrinsic motivation and their job satisfaction is driven by two factors (see Figure 7): 1) the large amount of effort that they put into their work (Q24, .36) and 2) their confidence to successfully complete work duties (Q28, .31). In other words, health workers are satisfied with their job because they believe that they are working hard toward work-related goals that they believe are achievable.

FIGURE 7. CORRELATION BETWEEN OVERALL HEALTH WORKER MOTIVATION AND INDIVIDUAL MEASURES OF JOB SATISFACTION IN THE CHAM SECTOR



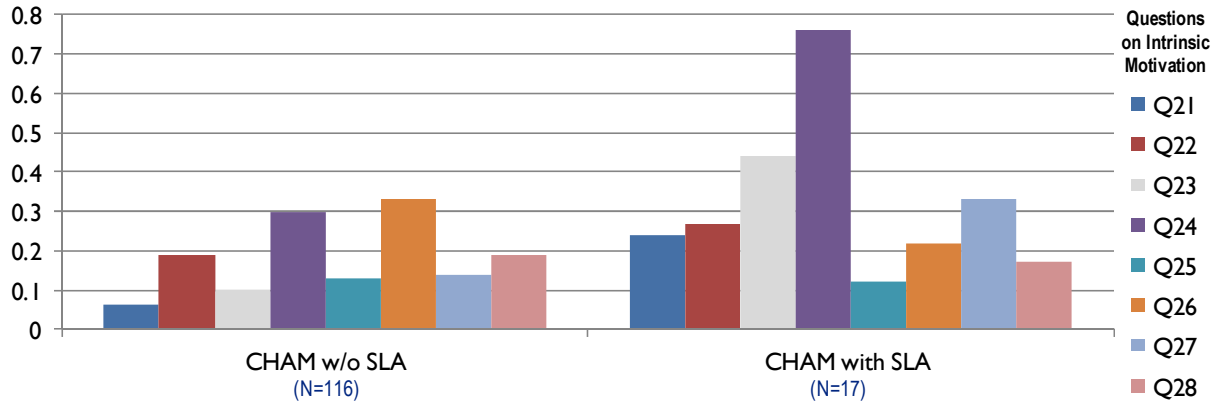
Although there is a strong relationship between CHAM sector health workers' overall level of intrinsic motivation and their job satisfaction, this relationship changes once the data are disaggregated by facilities with and without an SLA. Figure 8 shows that there is a slightly stronger relationship between health workers' overall level of intrinsic motivation and their overall level of satisfaction with their job in CHAM facilities with an SLA (.42) than in CHAM facilities without this contracting mechanism (.36)

FIGURE 8. CORRELATION BETWEEN HEALTH WORKER MOTIVATION AND JOB SATISFACTION IN CHAM FACILITIES WITH AND WITHOUT AN SLA



The difference between health workers' overall level of intrinsic motivation and their satisfaction with their job in CHAM facilities with and without an SLA can be largely explained by questions 23 (Q23) and 24 (Q24) in the closed-ended health worker instrument (see Figure 9). Health workers in CHAM facilities with an SLA appear to be more motivated and satisfied with their job than health workers in CHAM facilities without an SLA because they are more inclined to believe that the large amount of effort that they put into their work (Q24, .76) will have a positive impact on their patients and community (Q23, .44).

FIGURE 9. CORRELATION BETWEEN OVERALL JOB SATISFACTION AND INDIVIDUAL MEASURES OF INTRINSIC MOTIVATION FOR CHAM FACILITIES WITH AND WITHOUT SLA



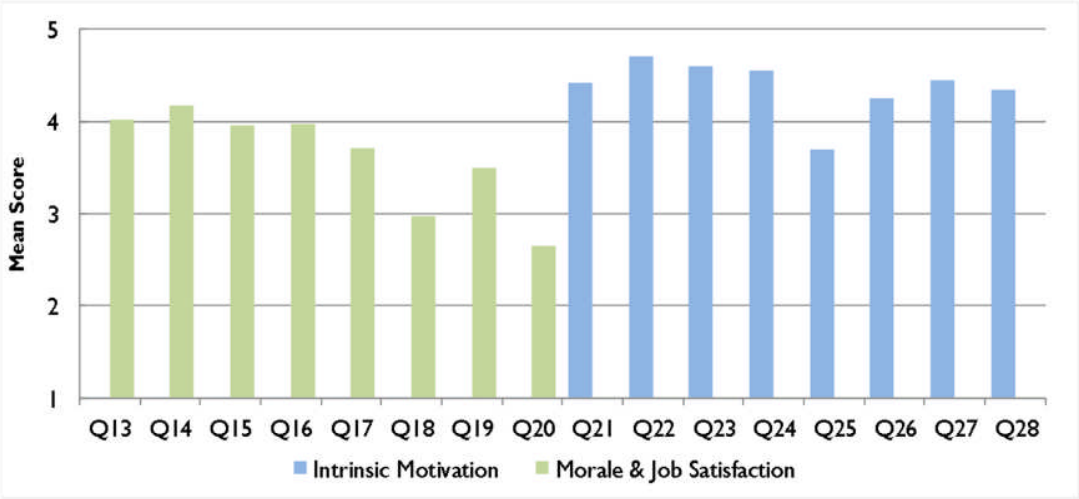
3.3 HEALTH WORKERS IN THE PRIVATE FOR-PROFIT SECTOR

Fifty percent of health workers in the private for-profit facilities are in their 30s. Three out of five health workers (approximately 60 percent) in the private for-profit facilities are male. Interestingly, health workers in the private for-profit sector have worked in health care longer (average of 12.79 years) than health workers in any other health sector. However, private for-profit health workers have not been in their current position longer than other health workers; health workers in the private for-profit sector have been in their current position for an average of 5.96 years, which is not substantively different from health workers in the public (an average of 4.67 years) and CHAM sectors (5.58 years in CHAM facilities with an SLA and 5.42 years in CHAM facilities without an SLA)

Figure 10 shows the mean levels of health worker motivation and job satisfaction in the private for-profit sector. Similar to the analyses conducted among health workers in the public and CHAM sectors, the results show the mean score value for each of the eight questions (Q13-Q20) that measure health worker motivation, and each of the seven questions (Q21-Q28) that measure health worker job satisfaction in the closed-ended health worker instrument. These questions are scored on the same 1 to 5 scale, with 1 indicating strong disagreement (no motivation or job satisfaction) and 5 indicating strong agreement (strong motivation or job satisfaction).

The mean scores for job satisfaction in private for-profit facilities range from 2.6 to 4.1, indicating that health workers are somewhat to just satisfied with their position. Average ratings on intrinsic motivation in the private for-profit sector range from 3.69 to 4.56, indicating that health workers are motivated to highly motivated to fulfill their jobs.

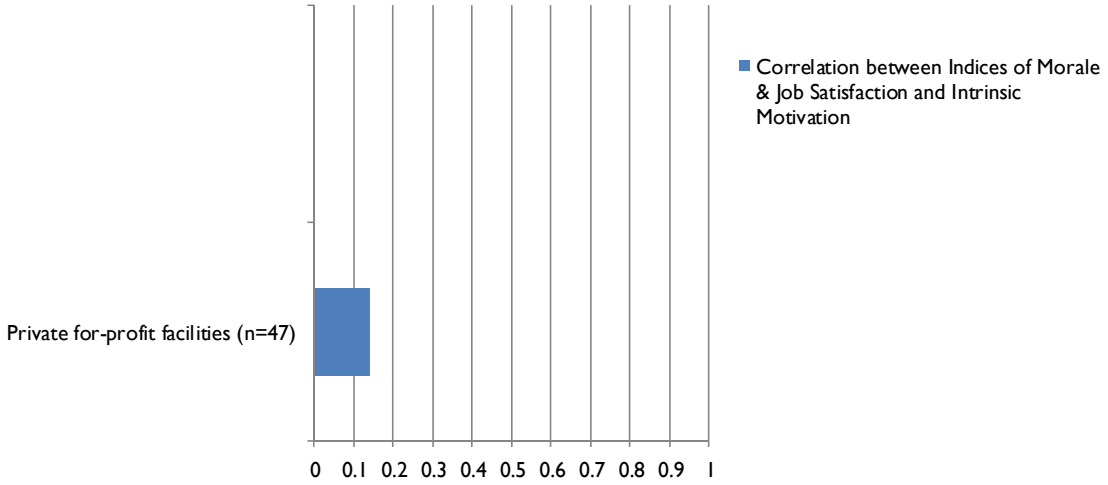
FIGURE 10. MEAN LEVEL OF HEALTH WORKER JOB SATISFACTION AND MOTIVATION IN PRIVATE SECTOR



Questions Relating Morale & Job Satisfaction (Q13-20) and Intrinsic Motivation (Q21-Q28)
(N=47)

These results suggest that private for-profit sector health workers are motivated and satisfied with their work. However, an analysis using composite indices of overall job satisfaction (combining Q13-Q20) and overall motivation (Q21-Q28) revealed that the relationship between health workers' overall level of intrinsic motivation and their overall level of job satisfaction is only .14 (see Figure 11). This indicates a very weak relationship between these two factors.

FIGURE 11. CORRELATION BETWEEN HEALTH WORKER MOTIVATION AND JOB SATISFACTION IN PRIVATE FOR-PROFIT FACILITIES



An analysis of the open-ended, health worker interviews provide insight into why private profit-sector health workers are so motivated to do their job. The results reveal that three main factors contribute to health worker motivation in the private for-profit sector: opportunities for 1) mentorship; 2) promotion; and 3) to work in a comfortable and supportive work environment – an environment that provides access to equipment and supplies as needed, strong management, a manageable workload, and cordial colleagues.

For example, a medical officer reported that he was highly motivated because he has "gained knowledge from other workers." Clearly, the opportunity to learn and be mentored is a motivator in the private sector.

One nurse in the private sector reported a different reason for her motivation. She said, "I was appointed to the post of ward-in-charge. This has motivated me to work extra harder." Clearly, this health worker is motivated to do her job because of the opportunity for advancement at work.

Finally, an administrator at a private health facility reported another reason why she is motivated to do her job. She said, "I am very motivated because communication with the Head Office is good. Every time we see patients we are able to meet the objective because the equipment and supplies are enough to carry out our activities." This health worker is motivated to do her work because of the supportive, well-managed work environment that she is in.

Health workers that reported being unmotivated said that their lack of satisfaction stemmed from an insufficient salary to cover basic needs, a retraction of benefits (e.g., free transportation and accommodations, and a lack of advancement opportunities).

3.4 ASSESSING THE RELATIONSHIP BETWEEN HEALTH WORKER COMPENSATION, MOTIVATION, JOB SATISFACTION, AND JOB RETENTION

Bivariate regression analyses were conducted to test whether 1) financial compensation has a significant impact on health worker job satisfaction, intrinsic motivation, and retention across health sectors and 2) whether health worker motivation is an important driver of retention across these same health sectors

	Public Sector	N	CHAM w SLA	N	CHAM w/o SLA	N	Private Sector	N	All Sectors	N
Overall Job Satisfaction										

in Malawi.

In order to conduct these analyses, composite indices of compensation satisfaction (combining Q35-Q37) overall job satisfaction (combining Q13-Q20), overall motivation (Q21-Q28), and overall retention (Q39-Q41) were used.

3.4.1 ASSESSING THE IMPACT OF FINANCIAL COMPENSATION ON HEALTH WORKERS

The results in Table 6 show that health workers' overall level of satisfaction with their financial compensation is significantly associated with their overall level of job satisfaction (.62). However, once disaggregated by sector, this relationship is not significant in private for-profit facilities and CHAM facilities with an SLA. This means that compensation is not necessarily driving higher rates of job satisfaction in these two types of facilities. Although financial compensation is, in some cases, a driver of health worker job satisfaction, the results show that financial compensation is not a driver of health worker intrinsic motivation and retention (-.04 and .05 respectively). These results are consistent with the human resources literature, which suggests that compensation alone is not an effective strategy for motivating and retaining health workers (Kotzee and Couper, 2006; Dieleman et al., 2006; Dieleman et al., 2003; Franco et al., 2004; Mathauer and Imhoff, 2006).

Once the results are disaggregated by sector, however, compensation has a statistically significant, positive effect on health workers' intrinsic motivation in CHAM facilities without an SLA (.26*). This suggests that financial incentives may be an important motivator in CHAM facilities without an SLA, but not necessarily in the other types of facilities.

Overall Compensation Satisfaction	.66* (.49-.82)	409	.59 (-.35 1.54)	17	.61* (.27-.94)	115	.46 (-.23-1.16)	47	.62* (.48-.77)	588
Overall Level of Intrinsic Motivation										
Overall Compensation Satisfaction	-.08 (-.19-.014)	413	-.39 (-1.1-2.9)	17	.26* (.07-.45)	117	-.21 (-.544-.12)	47	-.04 (-.13-.04)	594
Overall Level of Retention										
Overall Compensation Satisfaction	.00 (-.07-.07)	415	.19 (-.27-.65)	17	.14 (-.03-.31)	117	.22 (-.03-.48)	47	.05 (-.01-.12)	596

Note: Confidence intervals (CI) are in parentheses. Confidence Intervals (CI) indicates the reliability of the estimate; a narrower CI indicates a more reliable estimate.
Note: The "N" in parentheses indicates the sample size for each estimate.
: An asterisk "" signifies a statistically significant relationship at the 5% level. This indicates 95% confidence that this relationship is true, and not due to chance.

TABLE 6. FINANCIAL COMPENSATION ON JOB SATISFACTION, INTRINSIC MOTIVATION, AND RETENTION

The qualitative analyses of the health worker interviews supports these quantitative findings. Respondents across all three health sectors stated that nonfinancial incentives – convenience (e.g., house and family are nearby and transportation is accessible) and the opportunity to learn from experienced colleagues – impacted their decision to stay in their current position.

3.4.2 ASSESSING THE DRIVERS OF JOB RETENTION

The relationship between health workers' intrinsic motivation and job retention is also tested in this study. Table 7 shows that health workers' intrinsic motivation is significantly associated with the decision to retain employment (.15*). However, once disaggregated by sector, this relationship is only significant in public sector facilities (.17*). This means that intrinsic motivation is a primary driver of retention only in public sector facilities.

TABLE 7. ASSESSING THE IMPACT OF INTRINSIC MOTIVATION ON JOB RETENTION

	Public Sector	N	CHAM w SLA	N	CHAM w/o SLA	N	Private Sector	N	All Sectors	N
Overall Level of Retention										
Overall Level of Intrinsic Motivation	.17* (.11-.24)	416	.09 (-.27-.45)	17	.17 (-.03-.27)	117	.07 (-.15-.30)	47	.15* (.09-.20)	597

Note: Confidence intervals (CI) are in parentheses. Confidence Intervals (CI) indicates the reliability of the estimate; a narrower CI indicates a more reliable estimate.

Note: The "N" in parentheses indicates the sample size for each estimate.

: An asterisk "" signifies a statistically significant relationship at the 5% level. This indicates 95% confidence that this relationship is true, and not due to chance.

Analyses of the open-ended interviews with the health workers provided insight into 1) the factors, if not intrinsic motivation, that could explain health workers' decision to (not) retain employment in the private for-profit and CHAM sectors and 2) the other contributors to health worker job retention, or lack thereof, in the public sector.

In addition to intrinsic motivation being an important contributor to health worker retention in public sector facilities, work convenience (e.g., work close to home, family, and main road) and the intrinsic feeling among health workers that they are making a difference in their community, are also important. For example, a health surveillance assistant reported, "I like working here and will continue to work here because I am close to my husband." Another health surveillance assistant reported "I have stayed in my job because I want to help the community and help to reduce cases of cholera in Malawi." Clearly, health workers in the public sector have retained their jobs because of reasons of convenience and because they feel like they can make a difference in people's lives.

Health workers in public sector facilities also mentioned that the decision to retain employment is not always in their control; their employers may decide to transfer them to another facility, if needed. For example, a facility manager reported, "I had no choice. I was just posted here [at the facility] by the Ministry."

Public sector health workers also reported that they would leave their job under the following conditions: if they had the opportunity to go back to school to earn an advanced degree or if they identified a facility with better work conditions (e.g., access to a reliable source of equipment), better compensation (e.g., including from private NGO facilities), or a more manageable workload. For example, a patient attendant said she would leave her job "to continue school in order to increase chances for career development and a better package." A health surveillance assistant reported a different reason. He said he would leave his current job because he "would love to work in town for a better life (electricity and piped water)."

The results from the qualitative analyses are consistent in the CHAM sector. Health workers' lack of control over their place of employment is a driver of health worker retention in CHAM facilities. Health workers in CHAM facilities also reported that opportunities for career development, work convenience (e.g., work close to home, family, and main road and in an area with a low cost of living), and feeling like they were making a difference in their own community also impacted their decision to stay in their current job. Finally, different from public sector health workers, CHAM health workers mentioned that religion played an important role in their decision to retain employment; hence they stayed in their

current position because they valued working in a supportive, religious environment. For example, a hospital attendant reported,

> *"I like working in this facility because I benefit from the words of God because at this facility, sometimes we learn some religion."*

However, health workers in the CHAM sector reported that they would leave their current job for the same reasons mentioned by the public sector health workers – if they were given the opportunity to go back to school to earn an advanced degree or if they identified a facility with better work conditions, better compensation and a more manageable workload. Health workers in CHAM facilities also mentioned that they would consider moving to another facility if they found a work environment where they felt more appreciated.

Health workers in private for-profit facilities reported some of the same drivers of job retention as the health workers in the public and CHAM sectors. Private for-profit health workers reported that a supportive work environment (e.g., strong management), work convenience, and the opportunity to serve people in their own community led them to retain employment at their current facility. However, they also reported that better compensation, in comparison to facilities in the public and CHAM sectors, played an important role in their decision to stay at their job.

Health workers in the private for-profit sector reported that they would, however, consider leaving their job if they were given the opportunity to go back to school and earn an advanced degree; earn better compensation; or if they were given the opportunity to be placed in a more comfortable work environment (e.g., access to a reliable source of electricity). Different from the health workers in the public and CHAM sectors, however, the health workers in the private for-profit sector said that they might also decide to leave their current position if they could move to a facility with more job security. For example, a pharmacy technician assistant said, "I want to go back to Government for job security."

3.5 KEY MESSAGES FROM HEALTH WORKER ANALYSES

Some of the findings from the health worker analysis are contrary to what we might expect. First, health workers in the public sector report the highest level of intrinsic motivation. The high level of importance that public sector health workers place on their work was found to be one of the reasons why this might be the case.

Second, health workers in CHAM facilities with an SLA and without an SLA are not that different in terms of their levels of intrinsic motivation and job satisfaction. However, the relationship between these two factors was notably higher in CHAM facilities with an SLA than in CHAM facilities without this contracting mechanism. This finding suggests that the types of incentives used to increase health worker job satisfaction might need to be tailored to different types of facilities. Contrary to some perceptions, those CHAM facilities with an SLA did not exhibit lower levels of job satisfaction for health workers even though these facilities often have an increase in client volume as a result of an SLA.

The finding that is consistent with the human resources literature is that health workers' overall level of satisfaction with their compensation is not significantly associated with their intention to retain employment. This is the case across health workers as a whole in Malawi. This finding suggests that dissatisfaction with compensation is not a key reason to leave a health facility for another position. Instead, nonfinancial incentives (e.g., opportunities for mentorship, opportunities for promotion, and better work conditions) make a profound impact on whether or not health workers decide to stay at their job. Therefore, investing in nonfinancial human resources management strategies has the potential

to improve health workers' overall job satisfaction and ultimately, their decision to retain employment in Malawi.

4. CLIENT FINDINGS

This chapter presents findings from both the closed-ended and open-ended client interviews. These results are instructive both in understanding clients' perceptions about the quality of health care that they receive as well as their overall level of satisfaction with their health care-seeking experience.

4.1 DEMOGRAPHIC PROFILE OF CLIENTS

Figures 12 and 13 show the demographic profiles – age and gender – of clients included in the study. The demographic data are combined for all clients included in the sample as well as stratified by sector. Similar to the health worker analyses, the CHAM sector is further disaggregated into facilities with and without an SLA.

Results show that most clients are less than 30 (ranging from 40 percent in the public sector to 57 percent in CHAM facilities with an SLA). However, in private for-profit facilities, there is nearly the same percentage of clients who are less than 30 (~43 percent) as there is in their 30s (~40 percent). A majority of clients in the study are also female (ranging from 72 percent in the private sector to 81 percent in the CHAM facilities with SLA); this is the case across all health sectors in Malawi.

FIGURE 12. AGE RANGE OF CLIENTS (%) BY SECTOR

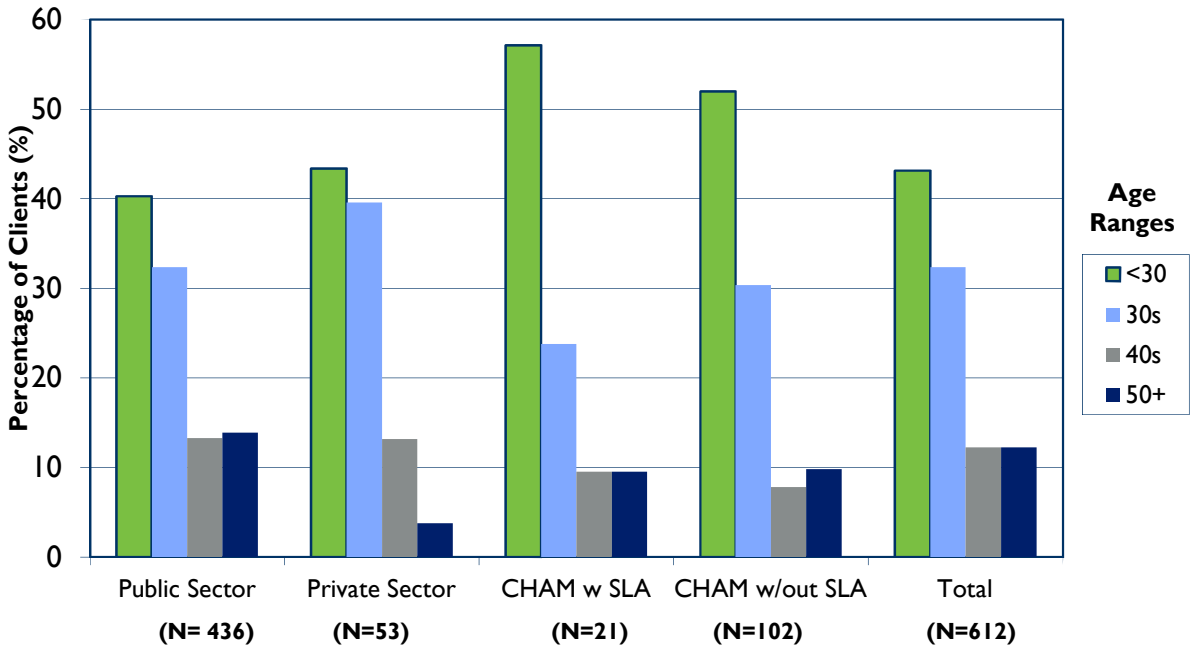
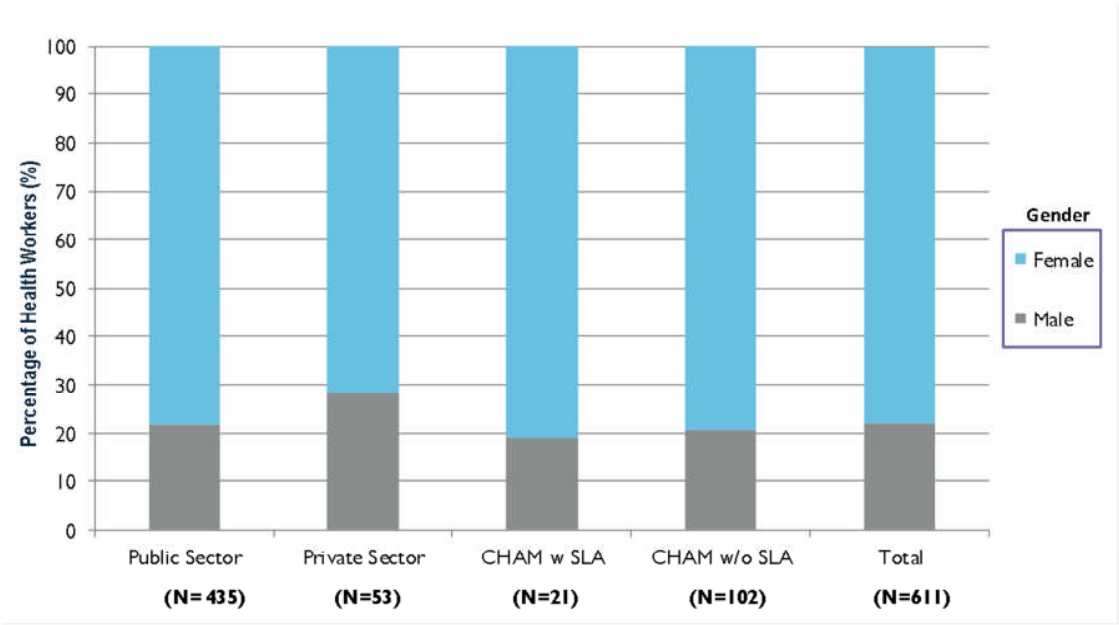


FIGURE 13. GENDER OF CLIENTS (%) BY SECTOR



4.2 CLIENT SATISFACTION AND CONFIDENCE WITH CARE

Table 8 shows clients' mean level of confidence and satisfaction with the health care that they receive. Clients' mean level scores on their confidence in treatment range from 1 to 4, with 1 indicating no confidence and 4 indicating strong confidence that the treatment received will resolve their health issue. Three composite indices were generated to measure client satisfaction. These indicators focus on provider satisfaction (combining Q11-Q13 and Q15-Q16), facility sanitation satisfaction (Q17 and Q18), and satisfaction with the level of patient confidentiality in the facility (Q20 and Q21). The range for the provider satisfaction index is 0-5, with 0 indicating no satisfaction and 5 indicating high levels of satisfaction with their provider. The range for the facility sanitation index is 2-8, with 2 indicating no satisfaction and 8 indicating high levels of satisfaction with the level of sanitation in the facility. Finally, the range for the patient confidentiality index is 0-4, with 0 indicating no confidence and 4 indicating high levels of confidence that private information will be kept confidential. All data were analyzed for clients as a whole as well as by health sector.

Results show that clients' mean level of confidence in the treatment that they received ranges from 3.15 in the public sector to 3.39 in CHAM facilities without an SLA. This finding indicates that clients are confident to very confident that the treatment that they received will be effective in resolving their health issue. Clients in CHAM facilities without an SLA have the highest average level of confidence in treatment (3.39). However, there is no substantive difference between clients' confidence in treatment across the public, private for-profit, and CHAM sectors in Malawi.

The results for the different measures of client satisfaction suggest that clients are satisfied with their overall experience at the health facility where they seek care. Indeed, clients report being satisfied to very satisfied with their provider (average scores ranging from 3.97 in the public sector to 4.18 in CHAM facilities with SLA). Clients at CHAM facilities with an SLA report being the most satisfied (4.18) with their providers.

Clients also find their health facilities to be clean to very clean (average scores ranging from 6.06 in the public sector to 6.9 in CHAM facilities with an SLA). Although there is not a substantive difference in clients' views on the cleanliness of facilities across sectors, public sector facilities ranked lowest in this category.

Finally, clients report high levels of satisfaction with their health facility's level of privacy (average scores ranging from 3.64 in the public sector to 3.96 in CHAM facilities with an SLA). This means that clients across all sectors found their examination rooms to be very private and were highly confident that their health information would be kept confidential by the facility.

Mean Score	Public Sector	N	CHAM w SLA	N	CHAM w/o SLA	N	Private Sector	N	All Sectors	N
Confidence in Treatment	3.15 (3.08-3.23)	433	3.32 (3.09-3.57)	21	3.39 (3.26-3.54)	102	3.27 (3.09-3.46)	53	3.22 (3.15-3.26)	609
Overall Provider Satisfaction	3.97 (3.91-4.04)	402	4.18 (4.02-4.35)	21	4.03 (3.92-4.15)	96	4.1 (3.97-4.23)	48	4.01 (3.95-4.06)	567
Overall Facility Sanitation	6.06 (5.94-6.19)	425	6.9 (6.41-7.41)	21	6.63 (6.41-6.87)	99	6.79 (6.51-7.08)	53	6.27 (6.17-6.38)	598
Overall Patient Confidentiality	3.64 (3.56-3.72)	424	3.96 (3.9-4.0)	21	3.81 (3.71-3.9)	100	3.84 (3.72-3.95)	53	3.7 (3.64-3.77)	598

Note: Confidence intervals (CI) are in parentheses. Confidence Intervals (CI) indicates the reliability of the estimate; a narrower CI indicates a more reliable estimate.

Note: The "N" in parentheses indicates the sample size for each estimate.

TABLE 8. CLIENT CONFIDENCE AND SATISFACTION BY SECTOR

4.3 CLIENT COMFORT AND RETENTION BY SECTOR

Given clients' high level of confidence and satisfaction in the care that they receive, it is unsurprising that clients also report that they feel comfortable and plan to return to their health facility in the future. Indeed, Table 9 shows that clients' average ratings for facility comfort range from 2.12 in the public sector to 2.42 in CHAM facilities with an SLA (the range for overall comfort is on a 0-3 scale, with 0 indicating no comfort and 3 indicating high levels of comfort with their experience at the facility). This finding indicates that clients are comfortable to very comfortable with their general experience at the facility where they seek care. Similar to previous analyses, there is no substantive difference between clients' level of comfort across sectors.

The results also show that nearly every client included in the study plans to return to their facility for care in the future (average scores ranging from 1.98 in the public and private for-profit sectors to 2 in CHAM facilities with SLA using a 0-2 scale). Only seven clients said that they would not return (N=2) or that they were unsure whether or not they would return (N=5) to their facility in the future. One hundred percent of clients at the CHAM facilities with an SLA reported that, if needed, they would return to their facility for health services.

TABLE 9. CLIENT COMFORT AND RETENTION BY SECTOR

Mean Score	Public Sector	N	CHAM w SLA	N	CHAM w/o SLA	N	Private Sector	N	All Sectors	N
Overall Comfort with Experience	2.12 (2.05-2.2)	432	2.42 (2.18-2.67)	21	2.37 (2.26-2.49)	100	2.32 (2.17-2.47)	53	2.2 (2.14-2.26)	606
Desire to Return to Facility	1.98 (1.97-2.0)	435	2 (2-2)	21	1.99 (1.97-2.0)	611	1.98 (1.95-2.02)	53	1.99 (1.97-2.0)	611

Note: Confidence intervals (CI) are in parentheses. Confidence Intervals (CI) indicates the reliability of the estimate; a narrower CI indicates a more reliable estimate.
Note: The "N" in parentheses indicates the sample size for each estimate.

4.4 QUALITATIVE ANALYSIS OF CLIENT FINDINGS

The qualitative analyses of the client interviews provided validation for, and insight into, why clients report such high levels of satisfaction with the care that they receive. Client responses particularly emphasized reasons why they are satisfied with their primary health provider. Clients discussed finding their provider: 1) technically skilled; 2) with a good bedside manner (e.g., kind, empathetic, respectful, and patient); 3) motivated and hard-working; 4) time-efficient; and 5) giving detailed explanations about treatment. For example, a patient at a public sector facility described the nurse that she visited as "very kind, had respect, and showed empathy." Another public sector patient described the medical assistant that she saw as "being very motivated" and skilled as he "asked me many questions concerning [my] problem."

Only clients in the private for-profit and CHAM sectors mentioned that they were satisfied with their primary health provider because they respected their privacy. For example, a female client reported, "The medical assistant I saw was so kind, knew what he was doing, and respected my privacy."

CHAM sector clients also reported that their providers' positive attitude impacted their perceptions about them. A male client reported that one of the reasons he was satisfied with his provider is because he "looked cheerful and willing to do his job." Finally, clients in the public and CHAM sectors both mentioned that their providers' ability to ask good questions was an important part of their provider assessment.

Clients in the public sector also reported some dissatisfaction with the quality of care received. Although a majority of the public sector clients named the same reasons for being satisfied with their care as the private for-profit sector clients, some reported being dissatisfied for the following reasons: a shortage of medicine at the facility to fully treat their health condition; a requirement to pay out-of-pocket for medication; long waits before seeing a provider; and concerns that their treatment plan was either insufficient or inappropriate to resolve their health problem (N=237).

In similarity to clients in the public and private for-profit sectors, CHAM sector clients reported being satisfied with their care as a result of being treated well, provided sufficient treatment and a real solution to their health problem, and made comfortable at the facility. They also reported the cleanliness of their facility also impacted their level of satisfaction with the care that they received. However, six clients did report being dissatisfied with the health services provided to them (N=70). These clients said that their dissatisfaction stemmed from a requirement to pay out-of-pocket for medication and concerns that the care provided to them would not resolve their health issue.

4.5 KEY MESSAGES FROM CLIENT ANALYSES

Overall, the quantitative analyses of the client interviews reveal that clients are confident in, and satisfied with, the care that they receive. Clients across sectors report being confident to very confident with the treatment that they receive as well as satisfied to very satisfied with their provider. Clients also find their health facility to be clean to very clean and are highly satisfied with the level of privacy that they experience when on a visit.

Average ratings on overall comfort also indicate that clients across health sectors are comfortable to very comfortable with their general experience at their facility. Clients' general satisfaction and confidence in their health care is further supported by the fact that nearly every client (98.8 percent) in the study reported that they wanted to return to their facility for health services in the future.

Although a majority of clients are satisfied with the quality of care that they received, the qualitative analyses reveal mixed results. Satisfaction stems from a range of factors, including providers' strong technical skills, good bedside manner, and their ability to make clients feel comfortable. However, dissatisfaction does exist, and a shortage of medicine at the facility, a requirement to pay-out-of pocket for medication, and long waits before seeing a provider, contributes to their level of dissatisfaction. Dissatisfaction with health services was found to be more pronounced among clients in public facilities than in any other sector. Addressing the barriers to client satisfaction is important for increasing interest in accessing care and improving Malawians' overall health and well-being.

5. CLIENT-PROVIDER FINDINGS

This chapter presents findings that combine responses from the client and health worker interviews. These results are instructive in determining whether clients' perceptions about the quality of their health care impact health workers' motivation and job satisfaction.

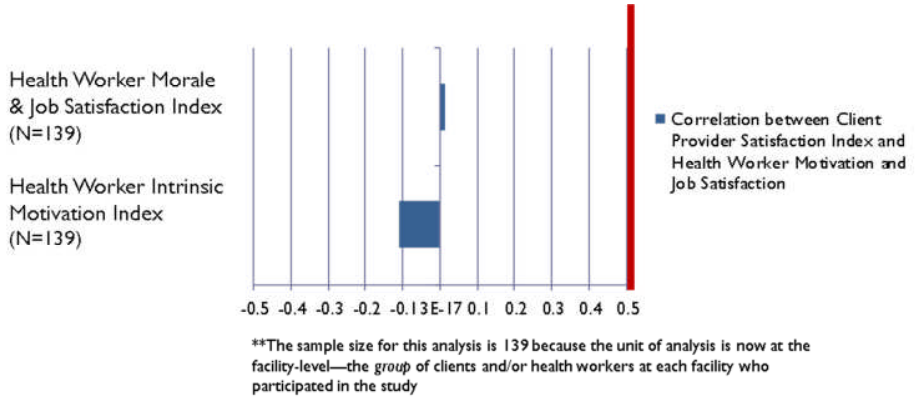
5.1 RELATIONSHIP BETWEEN CLIENT SATISFACTION AND HEALTH WORKER MOTIVATION AND JOB SATISFACTION

Different from the other analyses, the client-provider analysis used aggregated responses from clients and health workers. In other words, health worker and client interviews were grouped together in each facility in order to conduct this stage of the analysis. Because some facilities did not have client interviews, 139 of the 149 facilities included in the study sample were used. This strategy allowed us to estimate the impact of client perceptions about the care that they receive on health workers' job satisfaction and motivation at the facility, rather than individual level.

The results in Figure 14 show the correlation between client provider satisfaction, health worker motivation, and job satisfaction across Malawi's entire health system. Composite indices of clients' overall satisfaction with their provider (combining Q11-Q13 and Q15-Q16 in the closed-ended client instrument), health workers' overall morale and job satisfaction (combining Q13-Q20 in the close-ended health worker instrument), and health workers' overall level of intrinsic motivation (Q21-Q28 in the closed-ended health worker instrument) were used in this analysis.

Results show that there is a negative relationship between clients' overall satisfaction with their provider and health workers' overall level of intrinsic motivation (-0.11). There is also a very weak positive relationship between clients' satisfaction with their provider and health workers' satisfaction with their job (0.013). Generally speaking, both analyses indicate weak relationships between clients' overall satisfaction with their provider and health workers' perceptions about their jobs. This means that health worker motivation and job satisfaction is not strongly connected to their clients' opinions about them and their work.

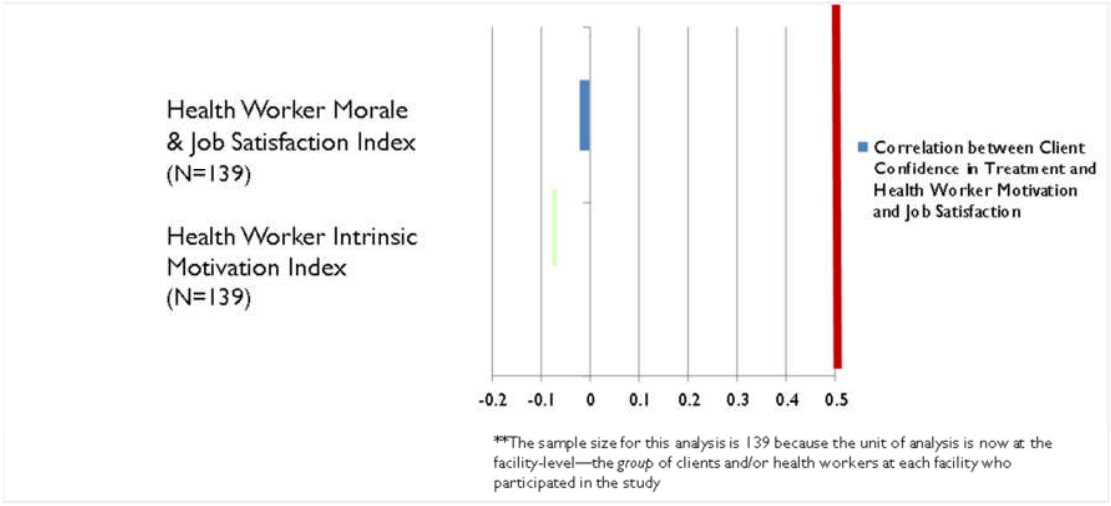
FIGURE 14. CORRELATION BETWEEN CLIENT PROVIDER SATISFACTION AND HEALTH WORKER MOTIVATION AND JOB SATISFACTION



**The sample size for this analysis is 139 because the unit of analysis is now at the facility-level—the *group* of clients and/or health workers at each facility who participated in the study

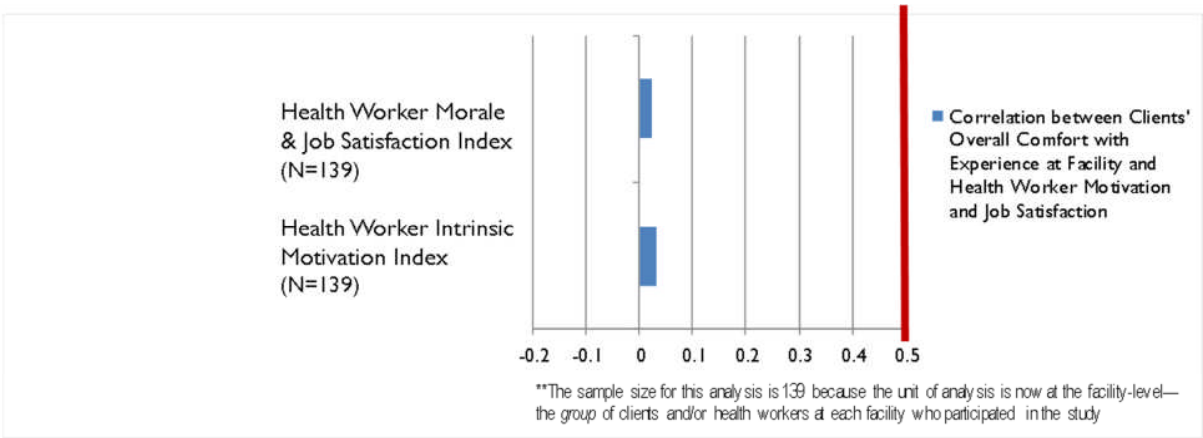
The results also show (Figure 15) that there is a negative relationship between clients' confidence in the treatment they receive from their provider (Q10 in the closed-end client instrument) and health workers' overall level of job satisfaction (-0.02). However, there is a positive relationship between clients' satisfaction with their provider and health workers' level of intrinsic motivation (0.013). Again, both of these analyses indicate a weak relationship between clients' confidence in treatment received and health workers' perceptions about their jobs (both correlations are close to 0).

FIGURE 15. CORRELATION BETWEEN CLIENT TREATMENT SATISFACTION AND HEALTH WORKER MOTIVATION AND JOB SATISFACTION



Finally, an analysis of the relationship between clients' overall level comfort with their experience at the facility where they seek treatment and health worker motivation and job satisfaction was conducted. The results (Figure 16) show that similar to the other analyses conducted, client satisfaction has a weak relationship with health worker motivation and job satisfaction (.0220 and 0.0329 respectively). Therefore, clients' perceptions about their comfort in the facility do not seem to play an important role when it comes to health workers' views about their jobs.

FIGURE 16. CORRELATION BETWEEN CLIENT COMFORT AND HEALTH WORKER MOTIVATION AND JOB SATISFACTION ACROSS SECTORS



Bivariate regression analyses were also conducted to test whether the results from the correlational analyses were correct – that there is a weak, overall relationship between client satisfaction and health worker motivation and retention – and to ascertain whether these relationships remain weak when the direct impact of client satisfaction on health worker motivation and job satisfaction is tested across sectors.

The results from the analyses on client perceptions of the quality of health services on health worker motivation and job satisfaction are consistent with the correlational analyses. Clients' overall level of satisfaction with their provider does not have a statistically significant, positive impact on health workers' overall level of intrinsic motivation and job satisfaction. This is the case across the public, private for-profit, and CHAM sectors in Malawi. The relationships between clients' confidence in treatment and their overall level of comfort at their facility on health worker motivation and satisfaction are also not statistically significant. This finding suggests that clients' perceptions about the quality of health services received do not have an important impact on health workers' perceptions about their jobs across the entire health system.

6. DISCUSSION AND RECOMMENDATIONS

6.1 DISCUSSION

This study provides important insights into the factors that influence health worker motivation and retention across all three health sectors – the public, private-for profit, and faith-based sectors – in Malawi. This study is unique because it is the first of its kind to investigate the influencers of health worker motivation and retention across a representative sample of the population in Malawi as well as across health sectors. Two types of data are used to examine the influencers of health worker motivation and retention in Malawi – health worker perceptions about their jobs and clients' perceptions about their providers. Both quantitative and qualitative methods are used to uncover health worker and client perceptions about their health facility experiences and to investigate the dynamic between these two sets of actors. Using a mixed-methods approach to this study has provided a high level of nuance and detail to the study findings and has given us the ability to validate and compare findings across different types of health facilities in Malawi. For this reason, this study may prove useful for generating recommendations about greater collaboration and coordination across health sectors in Malawi.

One of the main contributions of this study is that it describes the main profiles of clients and their perceptions about the quality of care that they receive. Results at the aggregate and sector levels show that clients are indeed satisfied with the care that they receive. Clients are confident in the treatment provided by their health providers and satisfied with the conditions of the health facility where they seek care. The high level of satisfaction in clients' health care-seeking experience stems from their health providers' strong technical skills, good bedside manner, and their overall ability to make their client feel comfortable. This study finding raises questions about the conventional evidence in the human resources literature, which denotes health worker job performance in low-income countries as inadequate (Rowe et al., 2005). Although using client satisfaction as an indicator of health worker job performance alone may be unreliable, client satisfaction can be combined with other measures of health worker job performance in order to gauge this complex construct and link the impact of the drivers of health worker motivation, satisfaction, and retention with their performance.

Although an overwhelming majority of clients in the study report being satisfied with the quality of care that they receive, some clients in the public sector report being dissatisfied with their care during qualitative interviews. These clients' dissatisfaction stems from a shortage of medicine at the facility to fully treat their health condition; a requirement to pay out-of-pocket for medication; long waits before seeing a provider; and concerns that their treatment plan was either insufficient or inappropriate to resolve their health problem. Although only a small fraction of the clients interviewed in this study report being dissatisfied with the health care that they receive, this dissatisfaction should be addressed, or monitored at the least, since client dissatisfaction can prove to be an arduous hurdle to overcome in the health care field.

In addition to providing a profile of clients and perceptions of their health care, this study also makes an important contribution to the field by describing the main profile of health workers and the drivers of health worker job satisfaction, motivation, and retention across sectors. Contrary to what we might expect, health workers in the public sector report the highest level of intrinsic motivation. The high level of importance that public sector health workers place on their work was found to be one of the reasons

why they are highly motivated at their job. This finding contradicts evidence in the literature which suggests that public health workers are less motivated than health workers in other (private/NGO) sectors (Mathauer and Imhoff, 2006).

The study findings also reveal that even though health workers in CHAM facilities with an SLA and without an SLA are not that different in terms of their discrete levels of intrinsic motivation and job satisfaction, the relationship between these two factors is notably higher in CHAM facilities with an SLA than in CHAM facilities without this contracting mechanism. This finding suggests that the MOH and USAID/Malawi might want to consider using different incentives to increase job satisfaction in CHAM facilities with an SLA than in facilities without an SLA. Indeed, it is possible that a motivation-based incentive (e.g., opportunities to gain prestige, improved work conditions) may be more effective in CHAM facilities with an SLA than in CHAM facilities without an SLA.

This study also shows that the relationship between client satisfaction and health worker motivation and job satisfaction is weak. These results are consistent across almost all measures of client satisfaction and health worker performance. There is a negative relationship between clients' overall level of satisfaction with their providers and health workers' overall level of intrinsic motivation, as well as between clients' confidence in the treatment that they receive and health workers' overall level of job satisfaction. This means that health worker motivation and job satisfaction is not strongly connected to their clients' opinions about them and their work. Interestingly, these results are inconsistent with the existing research on this topic, which has found client perceptions of their providers to be an important driver of health worker performance (Mathauer and Imhoff, 2006). Therefore, we do not recommend using strategies to encourage clients to express their appreciation to their health providers (e.g., via client comment cards), as it may not be effective for improving health worker performance in Malawi. Instead, we recommend focusing on developing human resource management strategies that focus on increasing health worker motivation and job satisfaction.

Finally, and perhaps most importantly, the study reveals that health workers' overall level of satisfaction with their compensation is not significantly associated with their intention to retain employment. This is the case across health workers as a whole in Malawi. Instead, nonfinancial incentives (e.g., opportunities for mentorship, opportunities for promotion, and better work conditions) are what impacts whether or not health workers decide to stay at their job. This finding is consistent with the conventional wisdom in the human resources literature which suggests that financial incentives alone do not increase health worker performance (Kotzee and Couper, 2006; Dieleman et al., 2006; Dieleman et al., 2003; Franco et al., 2004; Mathauer and Imhoff, 2006). Therefore, investing in nonfinancial, human resource management strategies (e.g., developing a work environment where health workers are enabled to meet personal and organizational goals), either alone, or in combination with financial incentives will improve health workers' overall level of motivation and job satisfaction and ultimately, their decision to retain employment in Malawi.

It is clear that this study significantly contributes to the evidence base in the health worker field by documenting and quantifying the levels and drivers of client satisfaction and health worker performance in Malawi across sectors. The findings from this study also make an important contribution to the human resources literature by filling gaps in, and raising questions about, our current understanding of client perceptions of their care, the client-provider dynamic, and the drivers of health worker motivation, job satisfaction, and retention.

6.2 FUTURE RESEARCH AREAS

The study findings suggest a number of areas that warrant future research. First, the field of HRH can benefit from studies that evaluate the drivers of health worker motivation, job satisfaction, and retention across cadres. While our study sample included health workers across all three health sectors in Malawi,

the sample sizes were not large enough to significantly assess and compare key factors across health worker cadres.

Additionally, the findings call for more future research on the client-provider dynamic. The research on this topic is both sparse and mixed. Previous studies on this topic suggest that client perceptions about their providers impact their performance. Our study finds otherwise. Conducting a study that focuses on investigating this relationship more rigorously could be beneficial to the HRH field.

This study also calls for more research on the patterns of health worker movement across sectors. During the health workers' open-ended interviews, the health workers provided insight into reasons for why they moved jobs. Reasons included the opportunity for growth and being posted to a new facility without any control. Investigating the pattern of staff movement, especially across sectors, would provide insight into whether health worker movement is common, the reasons for this movement, and whether there are preferences to work in one sector over another.

Finally, Health Systems 20/20 conducted a study investigating the drivers of health worker motivation in Uganda. Although the study had a smaller sample size and did not include client data collection, findings also suggested that nonfinancial incentives are the most statistically significant drivers of intrinsic motivation and that health workers are affected more by the perceived fairness of compensation as opposed to absolute levels of compensation. Taken together, both sets of findings suggest that health worker intrinsic motivation and job satisfaction in sub-Saharan Africa is highly affected by nonfinancial incentives.

6.3 RECOMMENDATIONS

6.3.1 USING CLIENT SATISFACTION AS ONE MEASURE OF HEALTH WORKER JOB PERFORMANCE

Study results show that the vast majority of clients, across sectors, are very satisfied with the quality of care that they receive. However, an examination of the literature shows that client satisfaction measures, particularly in the developing world, can be an unreliable gauge of quality: clients are prone to over-report feelings of satisfaction to appeal to data collectors or the facility itself; they may have low expectations or little experience of high-quality services; and they may focus on extreme negative experiences instead of gauging quality against a nuanced scale. Furthermore, qualitative data from the study showed that clients likely associate the interpersonal dimensions of health facility visits, friendliness, and niceness with high levels of satisfaction.

Although client satisfaction may not be a valid measure of quality of care, different indicators of client satisfaction, particularly related to the client-provider rapport, can be combined with other relevant measures of performance (e.g., cooperation and communication skills, technical competence of provider) in order to measure health worker job performance. These data can then be linked to the drivers of intrinsic motivation, job satisfaction, and retention for health workers in order to rigorously ascertain the extent that these relationships exist in Malawi.

6.3.2 DEVELOPING AN HRH PACKAGE OF INCENTIVES TO IMPROVE HEALTH WORKER MOTIVATION

As indicated in the study, nonfinancial incentives are a primary driver of health worker motivation and satisfaction across sectors. We therefore recommend that targeted packages of nonfinancial incentives be developed for supervisors at the health facility level. This package could describe the range of potential incentives that can be used to increase health worker motivation, the format for how these incentives can delivered, and an overview of the pros and cons of each approach. This package could also be tailored to different human resource situations and sectors, given reason to believe that some

facilities – CHAM facilities with an SLA and those without – may require different schemes. Incentives can include: informing health workers about their progress and providing them with feedback about their work in a systematic way; rewarding good performance with promotions; and giving staff recognition and awards in the form of training opportunities or being told, verbally or in a letter, that they are highly appreciated for their work.

6.3.3 INTRODUCING A MENTORSHIP MODEL TO IMPROVE HEALTH WORKER MOTIVATION AND JOB SATISFACTION

One of key drivers of health worker motivation is the opportunity to be mentored or learn from others with more experience. Given the importance placed on this driver of motivation in the study, we recommend that a mentorship model be developed for supervisors in order to increase the motivation and job performance of their staff. This model can include a standardized set of approaches and activities implemented by the health facility advisor and a site support team of supervisors to increase individual technical competencies and establish staff's sense of local ownership of their work. Ultimately, increasing the motivation and performance of these staff through a formal mentorship model can help to increase the quality of services provided and build local capacity to maintain a functional and sustainable local health care delivery system.

In conclusion, study findings present a number of practical and sustainable opportunities to increase the intrinsic motivation and job satisfaction of health workers across Malawi's health system. Nonfinancial incentives are an important tool to incorporate into the Programme of Work II and can ultimately complement and augment efforts to improve retention and production of health workers through financial incentives.

ANNEX A: FINAL INSTRUMENTS (ENGLISH)

HEALTH WORKER INSTRUMENTS

FORM A: INTERVIEW WITH HEALTH CLINIC SERVICE PROVIDERS

Q#	Question	Response Options
1	Name of interviewer:	
2	Date of interview:	
3	Facility code:	_____
4	Interview start time: Interview end time:	
5	Informed consent obtained	Yes (tick) _____ *Interviewer: Do not proceed until informed consent has been obtained*
6	Gender of participant	Female Male
7	In which year were you born?	19____
8	What is your official position in this facility? *Fill in open response at right*	_____
9	What cadre of health care worker are you? *Check all that apply*	Administrative/Facility Manager Physician Clinical Officer Medical Assistant Nurse Nurse Midwife Nursing Assistant Counselor or other Lay Worker (non-clinical) Volunteer Health Surveillance Assistant Laboratory Technician Other: Specify_____
10	How long have you been in service in your current position at this facility?	_____ years
11	How long have you worked in the health care field overall? [*Note, include all work experience but not school time.*]	_____ years
12	What is your marital status?	Married Divorced Single Widowed Other: Specify_____
	How religious do you consider yourself to be? [*Read the response choices out.*]	Very religious Religious Somewhat religious Not at all religious

FORM B: JOB PERFORMANCE AND MOTIVATION SECTION

For the following questions, please rate each statement from 1 to 5 using the following scale:

1 = Strongly Disagree **2** = Disagree **3** = No Opinion **4** = Agree **5** = Strongly Agree

The interviewer should give this section to the respondent to complete on their own after explaining the rating scale.

	A: Performance Support Factors					
1	My supervisor clearly communicates the expectations of my job.	1	2	3	4	5
2	I have adequate equipment and supplies to do my job.	1	2	3	4	5
3	I have adequate supplies and knowledge to protect myself against HIV at work.	1	2	3	4	5
4	I can turn to my supervisor if I have any challenges at work.	1	2	3	4	5
5	I receive performance feedback from my supervisor.	1	2	3	4	5
6	I receive feedback from my clients (patients).	1	2	3	4	5
7	I know how to get the information I need to do my job.	1	2	3	4	5
8	I have enough work to keep me busy.	1	2	3	4	5
9	This job is a good fit for my qualifications and skill level.	1	2	3	4	5
10	I am evaluated fairly at work.	1	2	3	4	5
11	I feel like my workload is manageable.	1	2	3	4	5
12	If I work hard and perform well, I will be rewarded.	1	2	3	4	5
	B: Morale and Satisfaction					
13	Overall, I am satisfied with my job.	1	2	3	4	5
14	I would recommend this facility to my friends and family.	1	2	3	4	5
15	I have the flexibility to balance my personal life with my job.	1	2	3	4	5
16	My opinion is valued at work.	1	2	3	4	5
17	I feel like my position is secure.	1	2	3	4	5
18	I have opportunities for promotion and career advancement.	1	2	3	4	5
19	My facility offers me professional development opportunities.	1	2	3	4	5
20	I think that other health workers in Malawi are treated better than I am.	1	2	3	4	5
	C: Intrinsic Motivation					
21	Overall, I think I am good at my job.	1	2	3	4	5
22	The work I do here is important	1	2	3	4	5
23	The work I do here results in positive outcomes for my patients and the community in general.	1	2	3	4	5
24	Overall, I put a lot of effort into my job.	1	2	3	4	5
25	I tend to get nervous at work.	1	2	3	4	5
26	I am proud to tell people where I work and what I do.	1	2	3	4	5
27	I contribute to the results achieved by this health facility.	1	2	3	4	5
28	I believe that I will be able to successfully complete all the tasks that are given to me.	1	2	3	4	5
	D: Faith and Religion					
29	Religion is often discussed at work in a formal manner by my superiors [*e.g., in meetings or by the Facility Management*]	1	2	3	4	5
30	Religion is often discussed at work informally with my colleagues.	1	2	3	4	5
31	I see my work here as a mission. [*e.g., calling from God, religious mission*]	1	2	3	4	5
32	It is important to me to work in a religious environment.	1	2	3	4	5
33	I believe that religion can help me serve clients well.	1	2	3	4	5
34	I would work as hard at a different facility as I do at my current facility.	1	2	3	4	5

	E. Compensation and Intention to Stay					
35	Considering my family's needs, my pay is adequate.	1	2	3	4	5
36	Compared to others who do similar work, my pay is fair.	1	2	3	4	5
37	I receive adequate additional benefits like time off for vacation.	1	2	3	4	5
38	I believe given my qualifications and experience, I can get a job with a different employer, providing similar financial and career advancement opportunities as my current job.	1	2	3	4	5
39	If it was my decision, I would remain in my current job for at least 12 months.	1	2	3	4	5
40	I am thinking of emigrating from my country in the next 12 months to seek better opportunities.	1	2	3	4	5
41	I would like to work in another sector of the health system in Malawi.	1	2	3	4	5

FORM C: OPEN-ENDED QUESTIONS

Interviewer should ask respondents to answer these questions honestly and openly. There are no right and wrong answers. Interviewer should record answers verbatim in space given. Interviewers should not probe respondent for answers except when noted.

1. What was your primary reason for wanting to join this facility? Why was this reason most important to you? *[Note: Ask respondent to choose only one reason]*	
2. How valued do you feel by your employer? Why or why not? What are some of the ways your employer shows that they value you as a professional? [How does the employer show you that they value you?]	
3. Does your facility or employer offer you any incentives related to your performance at work? If yes, what types of incentives are offered? Do these incentives influence how you work? If so, how?	
4. Was it your first choice to work at this facility? If so, why? If not, where was your first choice and why?	
5. How likely is it that you will be working at this facility three years from now? Why or why not? If not, where do you think you will be working and why?	

6. Have you worked in other facilities? If so, how were they different? Do you like working at your current facility more? Why or why not?	
7. Have you experienced changes in your professional motivation levels over the last year? If so, please explain how and why your motivation levels have changed.	
8. **For private for-profit and CHAM workers only**: Do you consider your facility to be part of an association or franchise? If so, what are the benefits to you of being part of an association or franchise? Note: An association is an organization of health facilities under a common management, administrative or church structure.	

CLIENT INSTRUMENTS

FORM A: INTERVIEW WITH HEALTH FACILITY CLIENTS

Q#	Question	Response Options
1	Name of Interviewer:	
2	Date of Interview:	
3	Facility Code:	_____
4	Interview start time: Interview end time:	
5	Informed consent obtained	Yes (tick) _____ *Interviewer: Do not proceed until informed consent has been obtained*
6	Gender of client	Female Male
7	In which year were you born?	19____
8	Have you or a family member come to this facility before for treatment?	1. Yes [*if answer is Yes, proceed to Question 9. For all other responses, SKIP to Question 10.*] 2. No 3. Don't know
9	Did the treatment that you received before in this facility solve or improve your health issue?	1. Yes 2. No 3. Don't know
10	How confident do you feel that your health issue today will be resolved based on the treatment	1. Very confident 2. Confident 3. Somewhat confident

	you received today?	4. Not at all confident
11	Did the main provider that you saw today introduce himself/herself to you when he/she entered the room?	1. Yes 2. No 3. Not sure
12	Did the provider ask you to explain your reason for coming to the clinic today?	1. Yes 2. No 3. Not sure
13	Did the main provider you saw today explain your treatment (how to take medication, what tests were necessary, etc.) in a way that you could understand?-	1. Yes 2. No 3. Not sure
14	Do you understand what you need to do to feel better after your visit today (come back for follow-up, take medication, etc)?	1. Yes 2. No 3. Not sure
15	Did the provider make you feel comfortable talking to him/her?	1. Yes 2. No 3. Not sure
16	Did the provider treat you and your problem with empathy and respect?	1. Yes 2. No 3. Not sure
17	How clean was the waiting room in this facility?	1. Very clean 2. Clean 3. Somewhat clean 4. Not at all clean
18	How clean was the examination room in this facility?	1. Very clean 2. Clean 3. Somewhat clean 4. Not at all clean
19	In general, how comfortable was your experience at the facility?	1. Very comfortable 2. Comfortable 3. Somewhat comfortable 4. Not at all comfortable
20	Do you feel that the health information that you gave to this facility will be kept confidential?	1. Yes 2. No 3. Not sure
21	How private was your examination or consultation room?	1. Very private 2. Private 3. Somewhat private 4. Not at all private
22	Do you want to return to this facility for health services in the future?	1. Yes 2. No 3. Not sure

Interviewer should ask clients to answer these questions honestly and openly. There are no right and wrong answers. Interviewer should record answers verbatim in space given. Interviewers should not probe respondent for answers except when noted

9 Overall, were you satisfied with the quality of the health services you received today? Why or why not? [*Note: If a client reported in Form A that the provider did not ask his/her reason for coming to the facility today, ask why.*]	
10 Did the provider who examined you today seem motivated at his or her job? Please explain why or why not.	
11 Which provider did you spend the most time with today? Please describe how the main provider you saw today treated you compared to other providers you have seen in the past. PROBE: *Kindness? Empathy? Technical skills? Motivation? Respect your Privacy?*	

ANNEX B: BIBLIOGRAPHY

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