Feasibility of Task Sharing: Primary Screening of Obstetric Fistula Clients by Midwives at a Fistula Treatment Site, Uganda

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Uganda Context

Maternal Health

Total fertility rate (TFR) is
 5.4

Source: UDHS, 2016

 Maternal mortality ratio (MMR) is336 per 100,000 live births

Source: UDHS, 2016

- Estimated national prevalence of obstetric fistula is 2%
 - Varies by region with the highest prevalence in Western Region at 4%

Source: UDHS, 2011

Health Worker Shortage

- Health worker to population ratio: 1:1,298
- Nurse/midwife to patient ratio:
 1:11,000
- Doctor to patient ratio: 1:24,725
- WHO recommends:
 - Doctor to patient ratio: 1:800
 - Health worker to population ratio: 1:1,298

Source: Uganda National Development Plan 2010/11-2014/15



Fistula Care *Plus* (FC+) Project

- Five-year (2013-2018) USAID-supported fistula repair and prevention project
 - Builds on, enhances, and expands the work undertaken by the Fistula Care project (2007-2013)
- Goal: To strengthen health system capacity for fistula prevention, detection, treatment, and reintegration in 5 priority countries:
 - Bangladesh, Democratic Republic of Congo, Niger, Nigeria, and Uganda

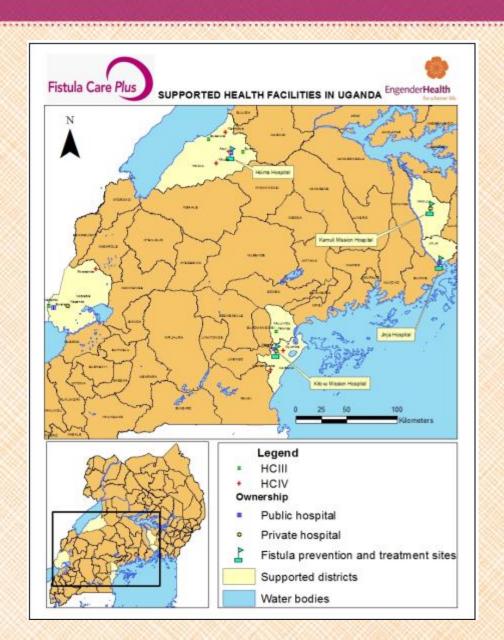


 Partners with ministries of health, faith-based and nongovernmental organizations, and other international and national collaborators



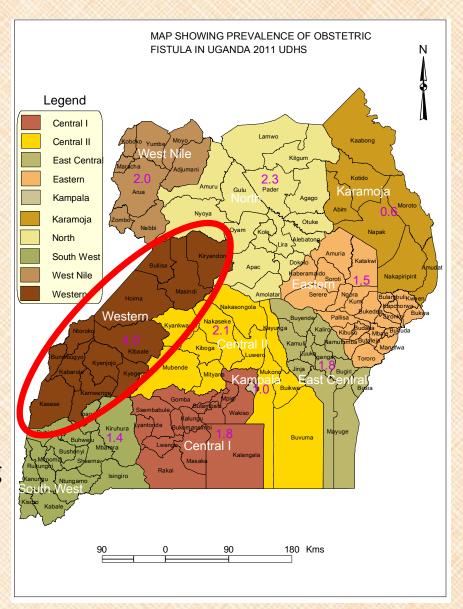
FC+ in Uganda

- Works in 6 Districts
- Supports 13 prevention-only sites (lower-level health care facilities)
- Supports 4 fistula treatment sites
 - Hoima Regional Referral Hospital
 - Jinja Regional Referral Hospital
 - Kamuli Mission Hospital
 - Kitovu Mission Hospital



Hoima Regional Referral Hospital (RRH)

- Public hospital
- Located in Western Region, which has highest fistula prevalence in country
 - Estimated fistula prevalence of 4%, compared to 2% nationally
- Supported by EngenderHealth since 2012
- Substantial health care worker shortages at Hoima RRH
 - As of March 2011, 251 out of 337
 staff positions were filled, leaving 85 positions vacant



Rationale for Fistula Screening Task-Shifting

- Given high patient-to-doctor ratio for specialized conditions, such as obstetric fistula, skilled cadres of health workers, such as midwives, can conduct primary fistula screenings
- Decrease time spent by doctors screening clients to confirm fistula existence
- Increase efficiency of health workforce resources





Task-Shifting Fistula Screenings from Doctors to Midwives

In 2012, FC, in collaboration with Uganda MoH, supported implementation of a primary screening model managed by midwives at Hoima Regional Referral Hospital

- Goal: To reduce the burden on fistula surgeons who perform fistula repair surgeries by promoting task-shifting of screenings to midwives
- 2 fistula trained surgeons couched/mentored 3 midwives on how to conduct fistula screenings of patients with incontinence, building midwives' clinical assessment capacity to screen for fistula



Task-Shifting Fistula Screenings from Doctors to Midwives (con't)

- Training used a mentoring and coaching model and was based on surgeons' knowledge and expertise
- After training, midwives were stationed in the primary screening area of hospital
- Midwives were provided with equipment (e.g. angle lights)
- Before each treatment camp, a one day 'refresher' is held



Methodology

- Reviewed 592 records from patients seeking care at Hoima between 2013-2016
- Compared outcome of primary screening by midwife to surgeons' secondary diagnosis at point of surgical treatment in operating theatre



Findings

53% of midwives' screening outcomes were found to be accurate

Diagnosis	# patients diagnosed by midwives	patients diagnosed accurately by midwives (<i>matched with surgeon</i> <i>diagnosis</i>)	% of patients accurately diagnosed by midwives
1 st degree tear	1	1	100%
2 nd degree tear	20	10	50%
3 rd degree tear	87	23	26%
4 th degree tear	87	69	79%
Cystocele	36	17	47%
RVF	59	28	47%
VVF	247	145	59%
Uterine prolapse	32	19	59%
Stress incontinence	23	0	0%
Total	592	312	53%



Discussion

- Preliminary analysis demonstrates midwives have the capacity to diagnose with varying competencies
 - Midwives particularly strong in diagnosing 4th degree tears (79%)
- Agreement between surgeons & midwives varied by condition
 - Conditions with < 50% diagnosis accuracy: 3rd degree tears (26%);
 Cystocele (47%); RVF (47%); Stress incontinence (0%)
- Evidence suggests midwives can develop competencies in diagnosing fistula and other gynecological conditions, if mentored/coached & provided with necessary clinical equipment
- Transfer of expertise, skills, and work-load to midwives in resource-constrained settings can significantly reduce waiting time for clients and reduce patient caseload/backlog

Challenges

- Few midwives were mentored and coached not enough with capacity to screen
- On job coaching does not include in-depth characteristics of other gynecological conditions
- Staff turnover one of the three trained midwives retired
- Experienced midwives taken to build capacity of midwives in other treatment facilities, leaving a human resource gap
- Workload is overwhelming during fistula camp (pooled effort)



Recommendations

- Fistula screening programs should undertake thoughtful consideration for how to build capacity for good-quality screening through taskshifting
 - Research shows that screening with inadequate quality can lead to delays in appropriate care and costs to vulnerable women
 - Programs promoting task shifting must be designed carefully to avoid amplifying this problem, while trying to make screening more efficient
- Develop and roll out a tailored curriculum for midwives to address the human resource gap that exists for specialized conditions like obstetric fistula
- Conduct further research into task-shifting to understand feasibility from all stakeholders – policy makers, implementers, and beneficiaries
- Development partners should support such innovations to address existing human resource gaps



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Fistula Care Plus Partners

















