POLICY BRIEF

Out of reach? The critical barrier of transportation to access reproductive, maternal and newborn health services for vulnerable women in northeast Cambodia

Executive Summary

Transportation plays a vital role in determining access to reproductive, maternal and newborn health (RMNH) services for the poorest. Women from remote areas experience high transportation costs, long travel distance, greater travel time, and challenging geographical terrain, in addition to associated opportunity costs. This brief affirms the need to address the issue of transportation as a critical barrier for low-income groups to accessing RMNH services in the four northeast provinces of Cambodia: Kratie, Stung Treng, Ratanak Kiri, and Mondul Kiri.

Key findings

- **Travel time is the predominant time cost:** In Cambodia's four northeast provinces travel time accounted for 78.5% of the total time spent accessing services for family planning, 73.1% for antenatal care and 68.4% for abortion care[1]. Time spent traveling is also impacted by geographic or climatic constraints.
- **Transportation is often unavailable and/or unaffordable:** For vulnerable women in the northeast the difficulty identifying affordable transportation in the community leads to either a delay in deciding to seek services at a health facility or in reaching the health facility, or both.
- **Distance and poverty pose a double burden**: Nearly half of the women from the poorest quintile in the northeast provinces sampled live more than 10 kilometres away from the health facilities. Poor women have fewer resources for care and must travel greater distances to reach available services. For every five kilometres from a health facility that a woman lives, the likelihood of delivering in a health facility decreases by more than 5.5%[2].
- **The transportation support offered by the Health Equity Fund[3] (HEF) is essential but limited:** The poor are expected to initially pay for the transportation and rates used often do not cover the actual cost. This is particularly true for hard-to-reach areas. Additionally, the HEF does not address the issue of transportation between the community and the health centre, except for childbirth.
- **Combination of interventions works better to address this complex issue:** An easy one-size-fits-all solution does not exist. Community-based referral mechanisms can provide sustainable and community owned solutions to complement HEF that take into consideration specific constraints and opportunities of the community.

Despite commendable achievements in providing access to quality RMNH services in Cambodia, geographic disparities remain strong and vulnerable groups such as poor women from remote villages, ethnic communities, adolescents and persons with disability are facing additional barriers. The four northeast Provinces of the country in particular are still lagging behind in achieving national RMNH targets due to challenges of poverty, ethnicity, language and geography. In rural Cambodia, and even more so in the northeast, the issue of transportation influences access to RMNH services as further detailed in this brief.

Partnering to Save Lives (PSL) is a partnership between the Cambodian Ministry of Health (MoH), the Australian Government, CARE, Marie Stopes International Cambodia and Save the Children. PSL works to improve quality, access and utilisation of RMNH services with particular attention to most vulnerable groups including impoverished women, ethnic communities, garment factory workers and women with disabilities. This brief summarises some of the learning of PSL studies.

[1] Consultant Report- Financial barriers to accessing RMNH services in four northeast provinces- PSL, August 2016
[2] Consultant Report- Financial barriers to accessing RMNH services in four northeast provinces- PSL, August 2016
[3] The HEF is a pro-poor 3rd party health financing mechanism which purchases health services for the identified poor and provides them with reimbursements for transport costs and caretaker food allowances (from Standard benefit package and providers payment mechanism for HEF, MOH 2014)

Transportation availability and accessibility

According to a PSL survey in 2015[4], **out of 55% of women in parts of Ratanak Kiri and Mondul Kiri who decided to deliver at home, 39% did so due to lack of transport and 24% due to shortage of funds.** Motorbike is by far the main means of transportation used by community members[5]. Most of the poorest households do not own a motorbike and if there is one available, women are relying on their husband or paid drivers to get to the health center.

I went [to the health centre] three times, I went when my husband could take me but then he became busy with work and could not take me and no one else could take me either…- Mother, aged 19, one baby, Khmer, Kratie[6].

The difficulty in arranging transportation is the most important. - Mother, aged 37, three children, Cham, Kratie, ID Poor[7].

PSL 2015 research on financial barriers further demonstrated that **women from the poorest quintile are more likely to borrow/rent vehicles than women from the wealthiest quintile.** The type of transport used to access RMNH services very much depended upon wealth. However, having an ID poor card[8] did not influence the type of transport used.

For antenatal care, women in the poorest quintile were almost eight times more likely to walk for care (21.2% versus 2.6%) than woman in the wealthiest quintile, who were three times as likely to use their own vehicle (78.0% versus 25.5%). Women with an ID Poor Card were approximately three times as likely to walk for antenatal care as women without an ID Poor Card (24.8% versus 7.4%). For delivery care, only a handful of women – 1.7% - walked for treatment. **Women from the poorest quintile were less likely to use their own vehicle** (18.7% compared 50.4% for wealthiest quintile) and more likely to use a borrowed vehicle (34.1% compared to 4.4% for the wealthiest).

Transportation cost

The main cost we need help with is for transportation to services – Mother, aged 46, six children, Khmer, Stung Treng, non-ID poor[9].

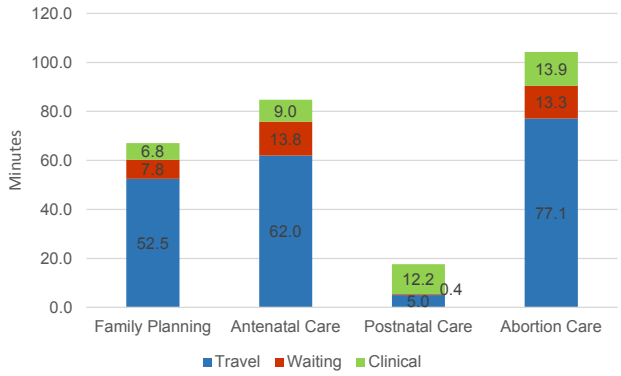
They will pay USD 20 for transportation fee to deliver here. It is hard to find the transportation fee. - Mother, Aged 31, Lao, Ratanak Kiri, non-ID Poor[10].

Recent interviews in Mondul Kiri and Ratanak Kiri[11] with 72 women found that **average transportation costs for patients to access services was 6,090 Riels with a maximum cost of 60,000 Riels.**

Long distance and traveling time

In addition to transportation costs, time spent traveling is a critical barrier in accessing RMNH services particularly in the northeast provinces of Cambodia. It is also an important contributor to the cost of RMNH services. **Figure 1** illustrates the time cost for women accessing RMNH services[12]. **Travel time is by far the largest component, averaging nearly one hour for several of the RMNH services.** In order to access services, patients need to travel, wait and take time off from work.

Figure 1: Time spent accessing RMNH services, by component



PSL survey results demonstrate that of the total 66.9 minutes spent on average to use family planning services, 52.5 minutes (78.5%) were spent traveling. Similarly, **for antenatal care 62 minutes (73.1%) of a total of 84.8 minutes were spent traveling to and from health services.** Women with ID Poor Cards spent slightly less time using family planning, antenatal care and abortion care services but slightly more time on postnatal care.

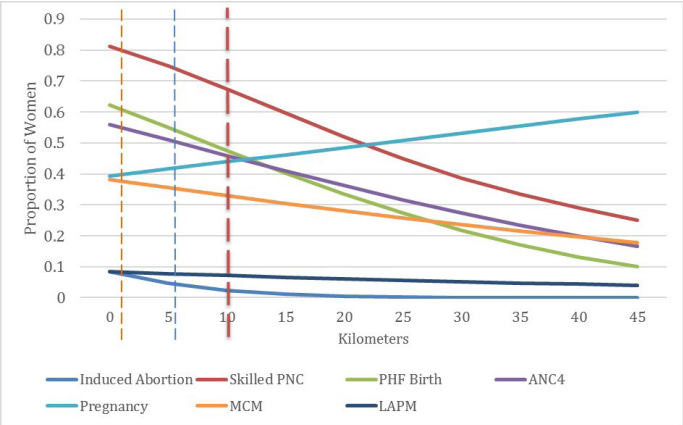
Women from wealthy backgrounds were able to access services more quickly than women from poorer backgrounds[13]. Poor households tend to be located further away from the RMNH facilities. For example, women from the poorest quintile spent 51.7 minutes on travel to access family planning services compared to 37.1 minutes for wealthiest quintile, 60 minutes versus 46.2 for antenatal care and 106.9 versus 50 minutes for abortion care.

Evidence further demonstrates that in Cambodia, **women who live more than five kilometres away from RMNH facilities with poor geographic terrain, were four times less likely to consult a health professional compared to women who live closer to health care[14].**

4 PSL Traditional Birth Attendant-Midwife alliance baseline in Mondul Kiri and Ratanak Kiri, Care Cambodia, 2015.
5 Community Referral System Snapshot Surveys. PSL, February 2015, August 2015 and March 2017
6 Evaluation of PSL behaviour change communication activities in the northeast of Cambodia. Kim Ozano, June 2016
7 Consultant Report- Financial barriers to accessing RMNH services in four northeast provinces- PSL, August 2016
8 Card providing eligibility to HEF support for the identified poor.
9 Consultant Report- Financial barriers to accessing RMNH services in four northeast provinces- PSL, August 2016
10 Same as above
11 Community Referral System Snapshot Survey. PSL, March 2017
12 Consultant Report- Financial barriers to accessing RMNH services in four northeast provinces- PSL, August 2016
13 Consultant Report- Financial barriers to accessing RMNH services in four northeast provinces- PSL, August 2016
14 Holmes, W & Kennedy, E 2010, 'Reaching emergency obstetric care: overcoming the 'second delay", Melbourne, Australia.: Burnet Institute on behalf of Compass, the Women's and Children's Health Knowledge Hub, retrieved 23 March 2017, < http://www.transaid.org/wp-content/uploads/2015/06/Reaching-emergency-obstetriccare-and-overcoming-the-second-delay.pdf>.

Figure 2[15] **demonstrates** distance as a key determinant in accessing RMNH services. Physical access, as measured by the distance to the closest health facility, is an important determinant in several RMNH indicators, including: four or more antenatal care visits, receiving family planning from a formal sector provider, and delivery in a health care facility. Furthermore, women are more likely to be pregnant the farther that they live from a health facility, possibly due to less exposure to birth spacing information.

Figure 2: Predicted use of health services by distance to health facility



Distance and absence of wealth pose a double burden for accessing RMNH services for poor women – poor women have both fewer resources for care and must travel greater distances to reach those services. Women in the poorest quintile were found to be more than four kilometers farther on average from the closest facility than women in the wealthiest quintile (10.8 kilometers versus 6.1 kilometers, p<.001), a result which is statistically significant. **Nearly half of women in the poorest quintile (47.7%) live more than 10 kilometers from the closest facility, compared with only 27.9% of women in the wealthiest quintile.** The qualitative research indicated that time spent arranging transport and taking transport was a concern, and the road conditions and remoteness of many households caused difficulties[16].

Poor geographic access and infrastructure

PSL Community Referral System Snapshot Surveys recorded the time and distance patients travelled from home to access services at the health centre. **The maximum distance and duration of transportation between the community and the health facility was higher during the rainy season survey (2nd survey, August 2015) with 75 kilometres and 420 minutes respectively.**

Table 1: Distance and duration of travelling from their home to the health facilities[17]

	Distance (km)			Duration (min)		
	1st Survey	2nd Survey	3rd Survey	1st Survey	2nd Survey	3rd Survey
Minimum	0.1	0.5	0.2	2	2	1
Maximum	52.0	75	55	180	420	210
Mean	6.7	6.8	10	24	25	34
Median	4.0	3	7	15	15	25

Note: PSL Snapshot surveys are health centres' exit surveys and results are therefore not representative of the population of targeted provinces.

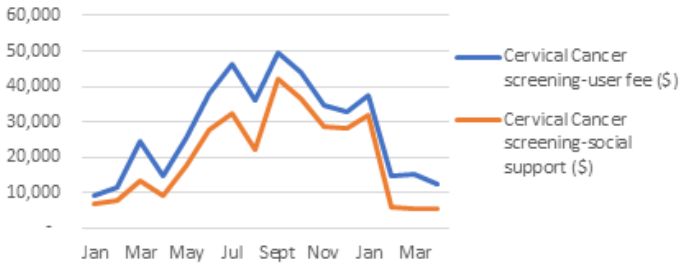
Transportation is by ferry and motorbike. When the waves come when it is windy… I am afraid as I am scared of falling out of the boat or the boat sinking from the water coming in. - Women, age 19, with a two months old baby, Khmer, Kratie[18].

Transportation reimbursement in the Health Equity Fund (HEF)

From July 2016 – February 2017, in the context of transition of HEF management to health facilities, the reimbursement of non-medical benefits (transport, food and funeral benefit) was frozen. Early evidence suggests this resulted in a decrease of services utilisation from ID Poor card holders. Anecdotal evidence collected by H-EQIP in early 2017 suggested **a drop in the number of HEF patients and an increase in exemptions as well as user fee, during the months when non-medical allowances and new post ID Poor[19] were unavailable.** Similarly, in the March 2017 PSL Community Referral Systems Snapshot Survey in the four northeast provinces, **the percentage of respondents mentioning the HEF as a source of expenditure for RMNH services dropped to 6% compared to 10% in the previous survey in August 2015.**

Vouchers

Figure 3: Association between user fee (service utilisation) and social support (Jan 2016- Apr 2017)



At the end of 2017, the KfW[20] supported voucher scheme will be merged with the HEF.

Support to transportation from community to the health centre and referral hospitals currently available for selected services is at risk of disappearing. The specific transportation support scheme for persons with disability is also at risk.

[15] PSL Financial barriers research, consultant report 2016 (secondary analysis of PSL baseline)
[16] PSL Financial barriers research, consultant report 2016 (qualitative research)
[17] PSL snapshot surveys in February and August 2015 and March 2017 (Respondents N1: 138, N2: 137, N3:162)
[18] Evaluation of PSL Behaviour Change Communication in the northeast of Cambodia. Kim Ozano, June 2016
[19] Post ID Poor identification provides opportunity for poor household not having an ID poor card to receive a priority access card valid until the next ID Poor Round that can be used to access services at referral hospitals and health centres
[20] Kreditanstalt für Wiederaufbau - German government-owned development bank

The program documented a strong correlation between the ceasing of social support payments (transportation and food) to non-poor eligible clients and a decrease in service utilization for cervical cancer screening in February 2017.

Community-based solutions to transportation issues

Buddhism for Health has introduced Community-Managed Health Equity Funds (CMHEF) to complement formal HEFs by considering some additional benefits such as the important element of transportation between the community and the health centre. CMHEF have proven to be very effective. Since their establishment, CMHEF structures remained active during periods without external funding and have geographically expanded to new areas[21]. The number of reimbursements is increasing and some committees have been successful in generating resources. **Introducing the CMHEFs resulted in a higher health centre utilization rate by HEF beneficiaries in CMHEF implementation areas.** For example, health centres' annual OPD case per capita was 0.84 in CMHEF target areas compared to 0.53 nationwide based on data collected between October 2016 and March 2017.

CMHEF also created a governance structure with broad community representation and engagement that is active in representing the needs of their communities through participation at meetings of the Health Centre Management Committees and Provincial and District Health Financing Steering Committees. The main difficulty is that it requires a substantial investment at the beginning to make the CMHEF functional.

Village Savings and Loan Associations (VSLAs) are another community-led initiative, where community members – mainly women—meet weekly and save over time and have access to larger sums of money to take out as loans. Social fees, paid each week, are often used for expenses related to childbirth and in case of larger expenses (including transport), loans are used. A recent evaluation of VSLAs implemented by CARE under PSL found that **VSLAs have played a key role in enabling communities to access health services, with 92.4% of women reporting that participation improved their ability to pay for health services[22].**

Challenges encountered by community-based health insurance experiences globally are low enrolment, adverse selection or limited renewal rates.

Conclusion

Difficulties associated with transportation are numerous and remain barriers for women from vulnerable communities to access RMNH services particularly in the northeast provinces of Cambodia. **Initiatives that have proven to be effective should be maintained or expanded in conjunction with the HEF, with special consideration given to communities living in remote and difficult to access areas.**

[21] Buddhism for Health- Community Managed Health Equity Funds; 2017

[22] Comparative Evaluation on Community-Managed Savings-Led Approaches in the Mekong: Impacts for the Health Component in Cambodia thanks in relation to the PSL Project, January 2017.

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