

Factors that affect quality of care: RMC among health workers in Malawi

Individual and facility-level factors based on self-reports

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Conflict of interest disclosure

- No conflicts to disclose.



This study is part of the APPHC Initiative

Advancements in Postpartum Hemorrhage Care (APPHC) is a collaborative research program



HEALTH EVALUATION AND APPLIED RESEARCH DEVELOPMENT (HEARD) PROJECT

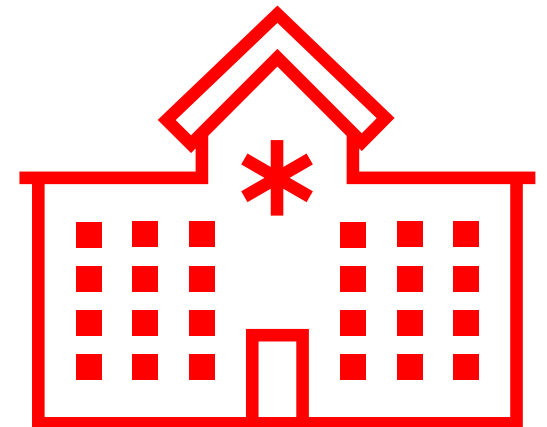
This study was funded by the United States Agency for International Development (USAID) under the Health Evaluation and Applied Research Development (HEARD), Cooperative Agreement No. AID-OAA-A-17-00002 and Breakthrough RESEARCH, Cooperative Agreement No. AID-OAA-A-17-00018. This study is made possible by the support of the American People through the United States Agency for International Development (USAID). The findings of this study are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.



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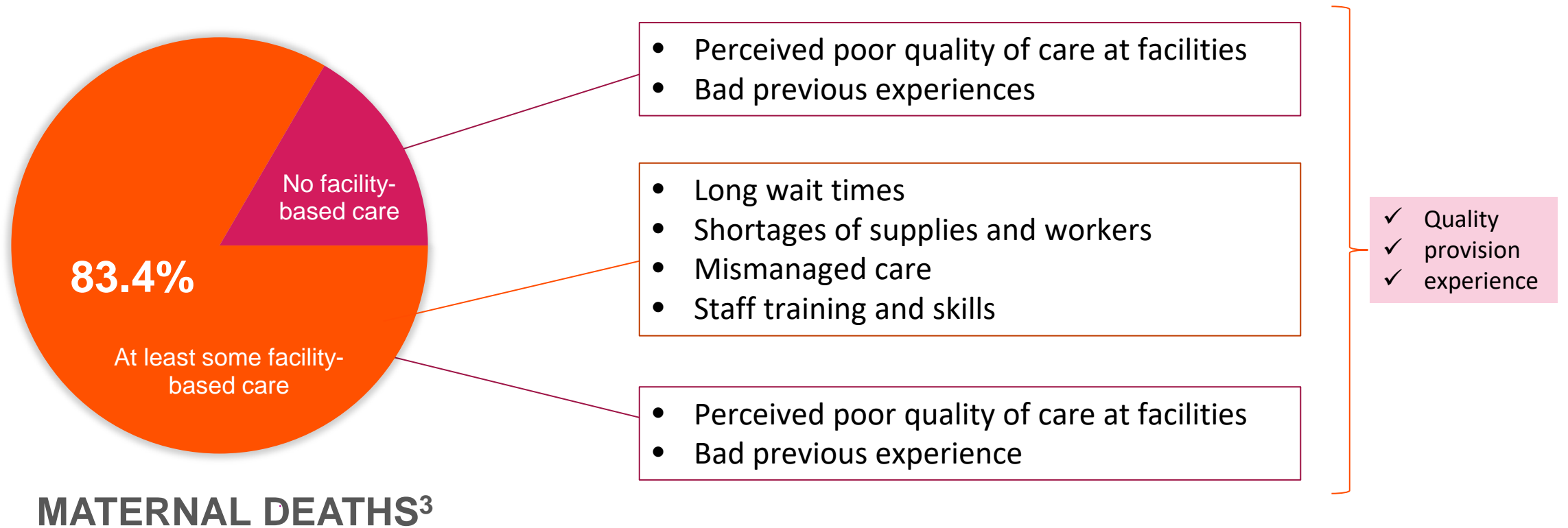
Advancements in Postpartum Hemorrhage Care (APPHC) is a collaborative research program

- Focused on improving maternal and newborn outcomes & experiences
- Surveys of women giving birth and the providers who care for them
- Recognizes that the facility environment is critical to improving quality



Malawi: High access, poor quality & outcomes

In-facility birth rate is >92%¹, but MMR remains unacceptably high²

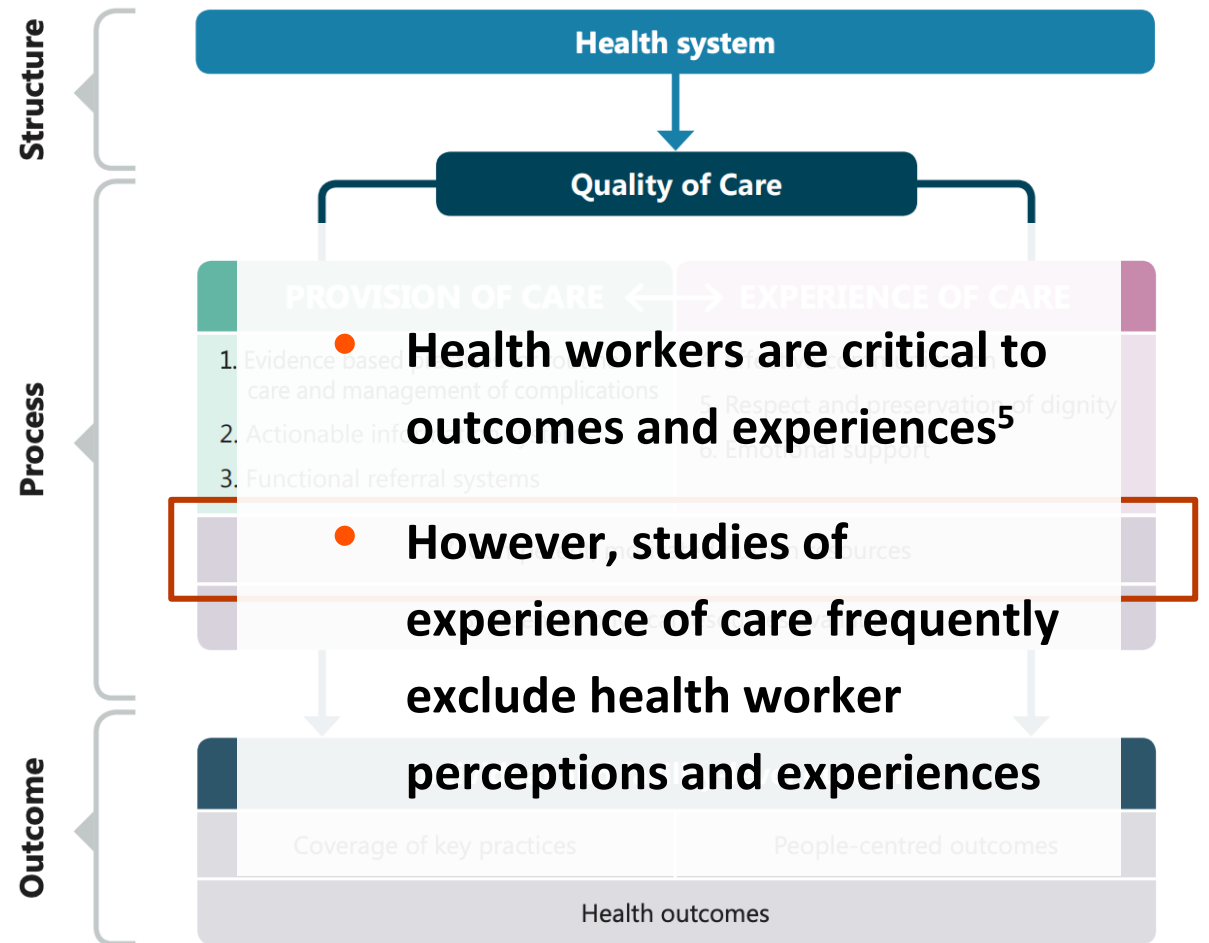


“Improving quality of care at healthcare facility level will help reduce maternal mortality.”

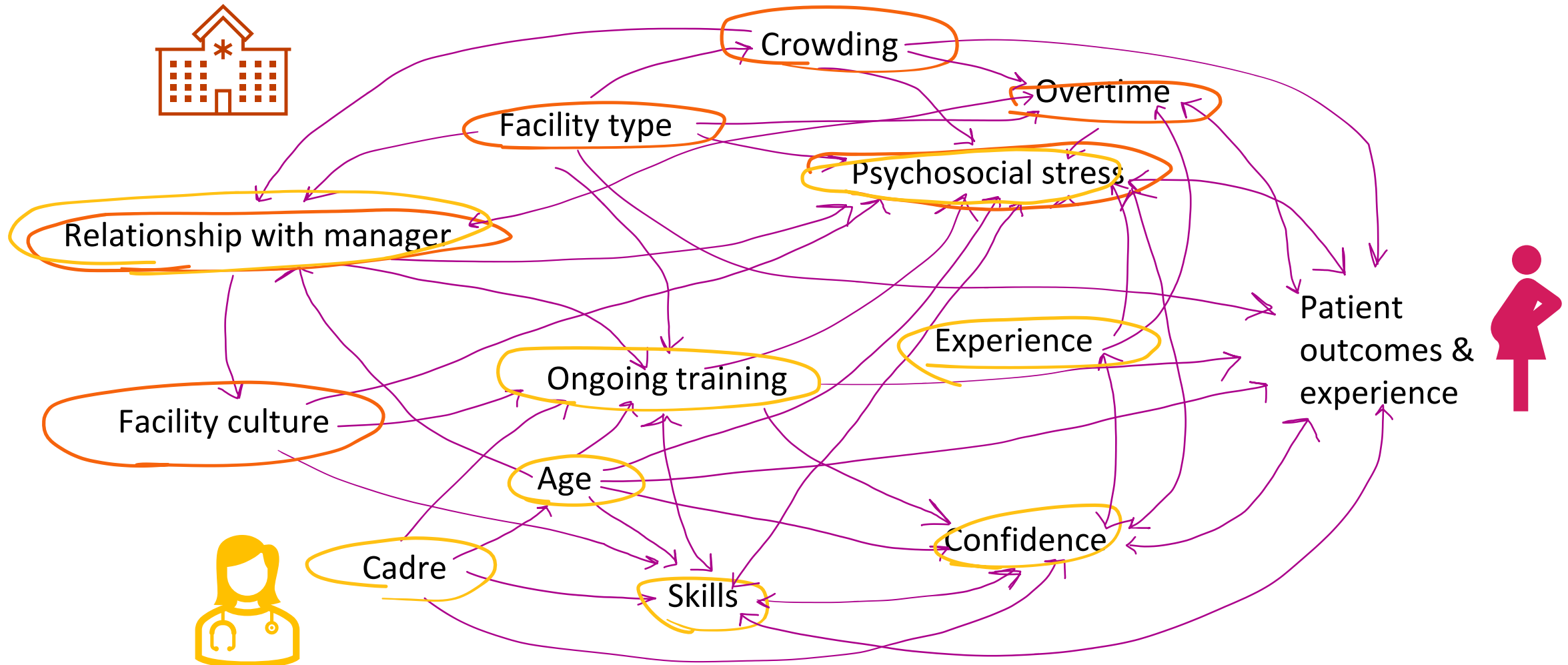
High-quality, respectful care is a basic right⁴

RMC also deeply affects outcomes

- Clinical outcomes
- Mental health outcomes
- Future care seeking



Providers also experience disrespect and abuse



NOT A DAG.

Our research questions and objectives

What are health worker perceptions of PCMC?

What factors predict health worker reporting of PCMC?

How can we improve quality and experience?



Methods & data collection

Multi-site cross-sectional health worker survey

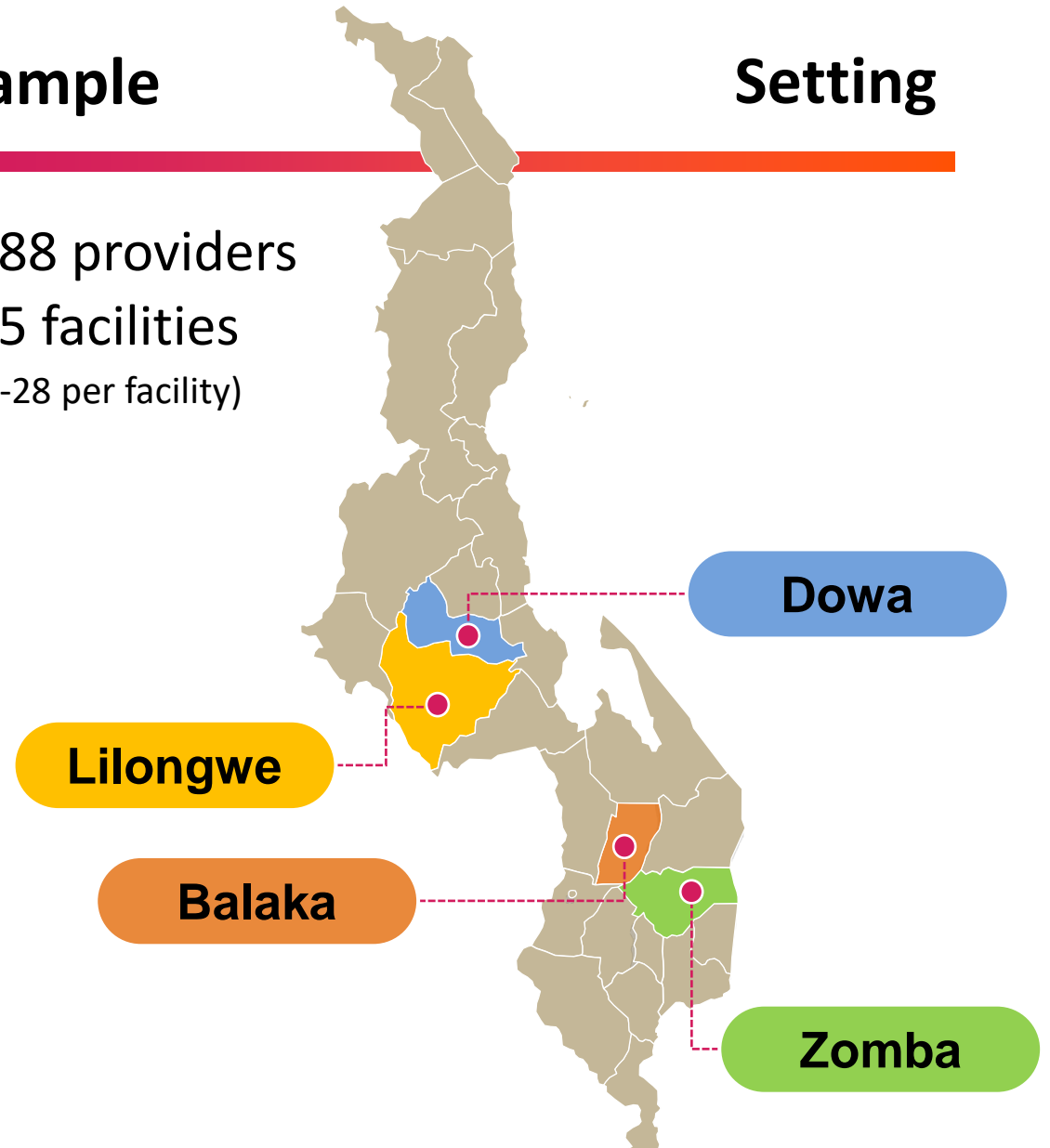
- **March 2020** (pre-COVID-19 shutdown)
- **Outcome**
 - RMC using 15-item **PCMC** scale
- **Predictors**
 - Provider-, facility-, system-level factors

APPHC Study

Sample

288 providers
25 facilities
(2-28 per facility)

Setting



Data analysis: Descriptive and predictive

- Descriptive statistics to understand detailed reporting of PCMC
 - Brief assessment of reporting on selves vs others
- Bivariate and multivariate regression models
 - Understand predictors of PCMC reporting
 - Adjustment for confounders
 - Adjustment for clustering of providers within facilities

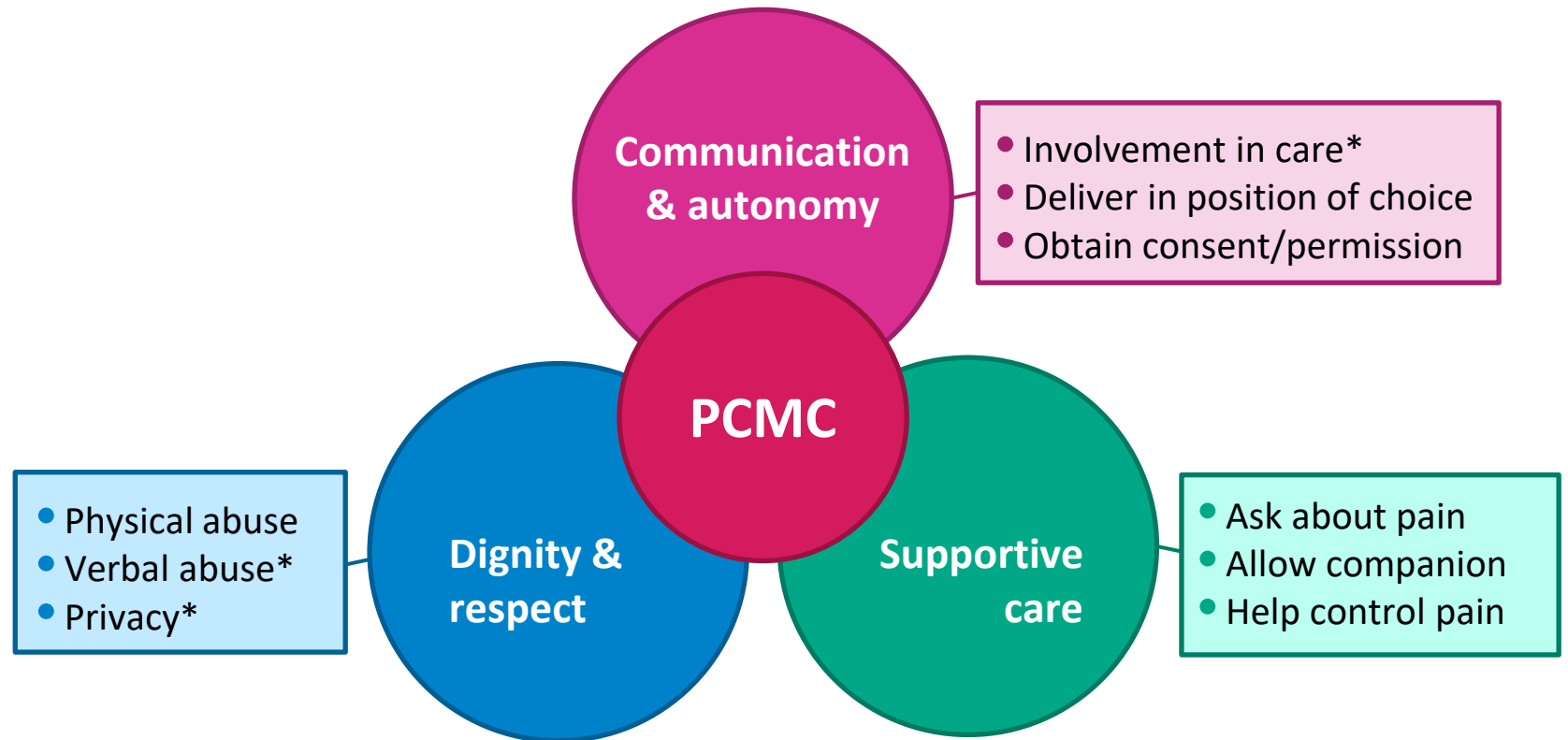


Person-centered maternity care (PCMC) scale

Provider-specific scale modified from the patient-focused PCMC scale developed by Afulani, *et al*⁶

Composite measure

- ✓ 15 items
- ✓ Each item 0-3
- ✓ Range 0-45



*Questions asked about selves and others

Predictors: Factors potentially affecting PCMC



*Some factors (e.g., burnout) are individual-level or facility-level factors that are affected by the facility and/or system



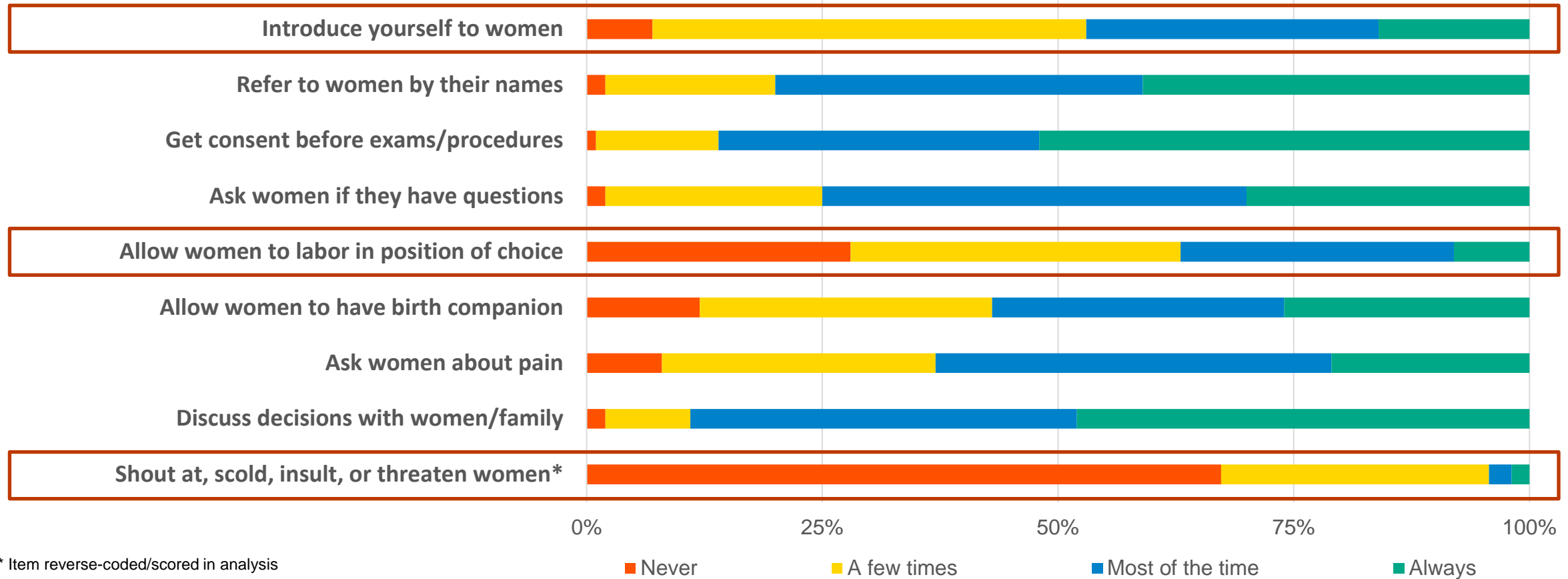
Results: Characteristics of providers	N=281
Age in years, mean (sd)	31.1 (7.1)
Female	68%
Cadre	
Physician/clinician	12%
Registered nurse/midwife	58%
Nurse/midwife technician	30%
Years of experience, mean (sd)	5.9 (6.6)
Worked unscheduled time in past month	59%
Training days per year, mean (sd)	6.3 (23.4)
PPH care self-efficacy score ^a , mean (sd)	31.4 (7.3)
Burnout – high or moderate emotional exhaustion	35%



Poor communication & autonomy, lower overt abuse

Results: Provider PCMC scale – select item scores (N=281)

How often do you ...



* Item reverse-coded/scored in analysis

• Mean total PCMC score was 73.7 (rescaled to 100; range: 36-100)

Respondents: higher scores for selves vs others

Results: Provider PCMC reporting for themselves vs others (N=281)

How often do you ...



How often do you see other providers ...



* Item reverse-coded/scored in analysis

0% 25% 50% 75% 100%
Never A few times Most of the time Always

- Difference in reporting was statistically significant ($p < 0.0001$)



Provider predictors

Results: Predictors of PCMC	Association with PCMC?
Age, sex	No
Cadre	↑ physician vs other, ↑ PCMC
Years of experience	↑ years (0-2 vs 6-9), ↓ PCMC
Time spent in training	↑ time, ↓ PCMC
PPH care self-efficacy	↑ score, ↑ PCMC
PPH care knowledge	↑ score, ↑ PCMC

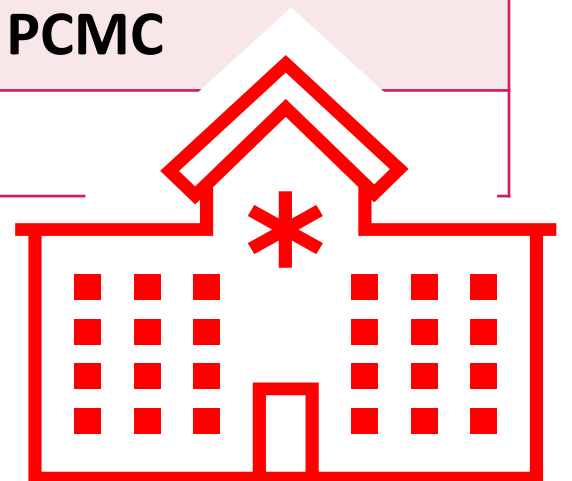
Bold text: Strong, consistent association regardless of modeling and effect clustering



System/workplace predictors

Results: Predictors of PCMC	Association with PCMC?
Burnout (high, moderate vs low)	↑ burnout, ↓ PCMC
Relationship with/support from manager	↑ support, ↑ PCMC
Facility type/size	↑ referral vs other, ↑ PCMC
Sector	No
Late pay/wages	↑ late pay, ↑ PCMC
Worked unscheduled time in past month	No

Bold text: Strong, consistent association regardless of modeling and effect clustering



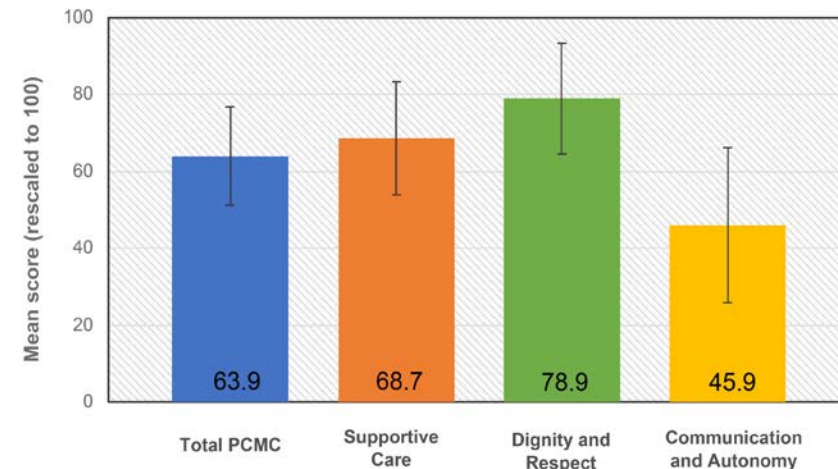
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Overall findings

Provider reports offer insights into quality of care from the perspectives of health workers

- Physical and verbal abuse were infrequent
- Opportunities to improve communication and autonomy
- Consistent with findings among women⁷

PCMC reporting among women in Malawi



2

Overall findings

- **Greater clinical knowledge and self-confidence associated with higher RMC**
- **High manager support consistently predicts higher PCMC**
- **Inverse associations between PCMC and years of experience, burnout, and time spent in training may reflect system-level stress and support issues**

Strengths

- ✓ Focus on provider reporting
- ✓ Inclusion of facility & system factors beyond demographics
- ✓ Mixed-effects models

Limitations

- ✓ Sample size
- ✓ Variability in respondents per facility
- ✓ Bias?



3

Recommendations

- 1. Further assess facility- and system-level issues that providers face**
- 2. Educate and support providers on provision of RMC**
 - Focus on interpersonal interactions
 - ✓ Providers and women
 - ✓ Providers and managers, facility, system
 - ✓ Address burnout and management support
 - ✓ In-facility or supported training that doesn't add to stress or burden
- 3. Interventions that integrate training on clinical skills and RMC principles can help elevate quality**

We would like to thank

- Research & implementation partners
- University of Malawi
- Providers & women in study
- All of you

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Thank you!

