Disclosure

• I have no disclosures to report
• Funding for my project was provided by Helmsley Charitable Trust
• Approved by IRB
Problem

• Worldwide shortage of primary care physicians, MT no exception
• Undersupply is problem in terms of both recruitment and retention
• Recruitment: how do we get talented MDs to rural areas
• Retention important: loss of rural providers also includes loss of expertise in rural issues
• Key issues to address with retention
  – Social issues
  – Professional issues
  – External factors
Montana Map

DISTRIBUTION OF MONTANA’S INTERNAL MEDICINE PHYSICIANS

Montana Health Care Delivery System
Internal Medicine Physicians by County Total
(Total number = 262)

Internal Medicine Physicians # by County

- None
- 5 or less
- 6 - 30
- 31 or more

Data Source: Montana Medical Association (July 2009)

Map created by the Folan Consulting
July 25, 2009
Why is Internal Medicine important in Montana?

• What makes IM unique?
  – Focus on adults
  – General med AND IM subspecialties (wide variety of diseases that affect adults, complex medical situations, multiple conditions that affect adults)
  – More relevant as population ages
  – Enable transition from outpatient and inpatient settings

National study: 53.1% of hospital CEOs report shortage of IM MDs
Lack of MT data

- No studies identified that focus solely on internal medicine physicians in MT
- 1 in CA, 1 study where primary care focus
- Other studies: Family practice, nurse practitioners, subspecialists
- Other countries: Australia, Southern Africa, Japan, Israel
Previous studies focusing on supply of rural physicians

- Financial incentives
- Rural clerkships during medical school
- Rural background*
- Ask CEO or recruiters about challenges
- No one has asked IM physicians in rural areas!
### Table 2. Characteristics of included reviews.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Country</th>
<th>Included studies</th>
<th>Type of professionals</th>
<th>Dimension</th>
<th>Factors having an impact on recruitment and/or retention</th>
<th>AMSTAR score</th>
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</thead>
<tbody>
<tr>
<td>Campbell et al.</td>
<td>2012</td>
<td>Australia</td>
<td>35</td>
<td>Allied health professionals</td>
<td>Recruitment and retention</td>
<td>Professional development; Professional isolation; Insufficient supervision; Rural lifestyle; Autonomy and community connectedness</td>
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<tr>
<td>Ballance et al.</td>
<td>2009</td>
<td>United States</td>
<td>21</td>
<td>Physicians</td>
<td>Recruitment and retention</td>
<td>Rural experiences during medical school and residency; Rural origin</td>
<td>5/11</td>
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<tr>
<td>Lehmann et al.</td>
<td>2008</td>
<td>Middle and low-income countries</td>
<td>55</td>
<td>Health personnel</td>
<td>Recruitment and retention</td>
<td>Career opportunities; Higher income; General living conditions; Rural upbringing; Work environment</td>
<td>6/11</td>
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<td>Brooks et al.</td>
<td>2002</td>
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<td>Primary care physicians</td>
<td>Recruitment and retention</td>
<td>Rural upbringing; Rural experiences during medical school and residency</td>
<td>10/11</td>
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<tr>
<td>Roots &amp; Li</td>
<td>2013</td>
<td>Canada</td>
<td>12</td>
<td>Rehabilitation professionals</td>
<td>Recruitment and retention</td>
<td>Rural background; Professional support; Professional development</td>
<td>9/11</td>
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<td>Bilodeau &amp; Leduc</td>
<td>2003</td>
<td>Australia, Canada, USA</td>
<td>37</td>
<td>Physicians</td>
<td>Recruitment and retention</td>
<td>Rural background; Rural experiences; Career opportunities; Professional support; Autonomy</td>
<td>6/11</td>
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<tr>
<td>Viscomi et al.</td>
<td>2013</td>
<td>Canada and Australia</td>
<td>86</td>
<td>Family practitioners</td>
<td>Recruitment and retention</td>
<td>Rural background; Rural experiences during medical school and residency; Rural lifestyle; Career development</td>
<td>7/11</td>
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<tr>
<td>Trépanier et al.</td>
<td>2013</td>
<td>Canada</td>
<td>15</td>
<td>Newly graduated nurses</td>
<td>Recruitment</td>
<td>Rural background; Rural clinical experience; Opportunities for family practice; Professional and peer support; Income potential</td>
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<td>Henry et al.</td>
<td>2009</td>
<td>Australia</td>
<td>Not specified</td>
<td>Medical graduates</td>
<td>Recruitment</td>
<td>Rural background; Rural clinical experience; Rural lifestyle; Professional support</td>
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<td>McAuliffe &amp; Barnett</td>
<td>2009</td>
<td>Australia</td>
<td>10</td>
<td>Occupational therapy students</td>
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<td>Rural background; Rural placement; Professional support; Career opportunities</td>
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<td>Philipp &amp; Wright</td>
<td>2005</td>
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<td>Not specified</td>
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<td>Humphreys et al.</td>
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<td>Australia</td>
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<td>General practitioners</td>
<td>Retention</td>
<td>Professional support; Autonomy; Continuing medical education; Opportunities for family practice; Rural lifestyle</td>
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<td>Glazbrook &amp; Harrison</td>
<td>2006</td>
<td>Australia</td>
<td>66</td>
<td>Medical practitioners</td>
<td>Retention</td>
<td>Career development; Continuing education; Family support; Working and living conditions; Financial incentives</td>
<td>6/11</td>
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<tr>
<td>Roberge</td>
<td>2009</td>
<td>Canada</td>
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<td>Nurses</td>
<td>Retention</td>
<td>Rural lifestyle; Professional support; Autonomy; Peer recognition; Community satisfaction</td>
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<td>Willis-Shattuck et al.</td>
<td>2008</td>
<td>Developing countries</td>
<td>20</td>
<td>Health workers</td>
<td>Retention</td>
<td>Financial incentives; Career development; Professional support; Working conditions; Peer recognition</td>
<td>9/11</td>
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</tbody>
</table>
Problems with prior studies

• Little research focusing on what would make IM physicians go to and STAY in rural areas in MT
• Previous studies in other countries: complaints re: administrative work, family obligations, lack of locums, lack of career opportunities
  – Weak methodology: small study size, lack of MD’s personal or professional backgrounds
• Therefore, we wanted to identify factors that are statistically related to IM physicians intentions to come to and stay in rural areas
Qualitative research

- Goal: Ask the participants (IM physicians) themselves
- This study: grounded theory of qualitative research
  - Meaning of social phenomena from lived experiences
  - Gather information about human behavior (the why?) → interviews “Why did you...?”
  - Categorizes data into patterns (themes)
  - Analyzes themes for meaning
Qualitative Research Methods

• Semi-structured interviews
• Saturation
• Data analysis
• Atlas software
• Member checking
Original Research

What interventions do South African qualified doctors think will retain them in rural hospitals of the Limpopo province of South Africa?

T Kotzee¹, ID Couper²
Montana study

- Population: Internal Medicine physicians in rural MT and Northern WY
  - Active practice of IM, all or part of practice
- Rural areas: defined by U.S. Census, < 50,000 inhabitants
- How identified: MMA, referral base, Google
- Contact: phone, email, referral base
- Interviews: recorded, in-person or by phone
The Questions?

• What attracted you to practice IM in rural Montana?
• What opportunities does practicing internal medicine in rural Montana offer your career?
• What would make it attractive for you to continue working in rural Montana?
• What makes you want to leave your current position?
• How did you overcome any challenges faced practicing and living in a rural or remote area?
• What suggestions do you have for internal medicine physicians considering a rural practice in Montana or Wyoming?
Demographics

• Age
• Gender
• Marital status (where did your spouse grow up)?
• Number and age of children (if any)
• Country of origin (if U.S., which state)
• Where did you grow up? (would you consider the area rural?)
• Undergraduate school, degree/major
• Medical school, country (if not U.S.)
• Allopathic or osteopathic program
• Native American heritage
• Practice size (number of other IM physicians in group)
Preliminary Findings: Recruitment

• What attracted you to practice IM in rural MT or Northern WY?
  – Local origin or rural upbringing
  – Lifestyle (commute, outdoor activities, small community, dissatisfied with urban practice)
  – Public health background
  – Scope of practice, hybrid practice model
  – Work on a reservation
  – Student loan repayment*
Recruitment: taking up rural practice

- What opportunities does practicing IM in rural area offer your career?
  - Scope of practice
  - Ability to know your patients and colleagues
  - Good work/life balance
Retention: Staying in rural practice

- Lifestyle (outdoors, QoL, minimal commute)
- Support from local community
- Scope of practice, enjoy hybrid practice model
- Support of administration (CEO)
- Flexibility of practice model (mold practice to how want to practice)
- Administrative support (paperwork, staff)
- Student loan repayment*
Retention: Overcoming challenges

• Heavy workload
  – asking for help
  – Negotiating contract to hire new additional providers, limit workload
• Lack of subspecialties: establish network of subspecialists that can phone consult
  – Learning new skills
• Lack of anonymity
• Bureaucracy: ensuring good relationship with CEO/hospital upfront
Suggestions for IM physicians considering rural practice

• Broad training, education, exposure
  – Learn new skills!

• Create appealing practice model
  – Good partners, good administration, non-compete clause*

• Be willing to expand what you are willing to treat (feel comfortable treating)

• Good referral base
  – Develop and maintain contacts
Demographic data

- Age: range 38-67, average 45.375
- Gender: male 11, female 5
- Marital status (where did your spouse grow up)? 15M, 1 S
- Number and age of children (if any): average number 2
- Country of origin (if U.S., which state): US 100%
- Where did you grow up? (would you consider the area rural?) MT, WY, WA, MA, KY, CO, OH, IL
- Undergraduate school, degree/major: Biology, other sciences
- Medical school, country (if not U.S.): UW (3/16), UConn, Vanderbilt, Emory, Harvard, Yale, others
- Allopathic or osteopathic program: 15 MD, 1 DO
- Native American heritage: 2/16
- Practice size (number of other IM physicians in group): range 1-8
Who cares?

- IM residency program directors in MT: choose applicants who will stay after residency
- CEOs of hospitals: same
- IM physicians: should I practice in MT
Proposed future research

• Qualitative Analysis of physicians working with Native Americans populations in Montana
Request

• Data collection open until May 1, 2018
• If you have 5-10 minutes and practicing IM in rural MT, please let me know…
References