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MEDICAL STUDENTS AND HOME- BASED PRIMARY CARE : EDUCATION OUTSIDE OF THE CLINIC

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UVMMC MILTON FAMILY PRACTICE – MILTON VERMONT

OCTOBER 2020

PROJECT MENTOR: DR MEGAN MALGERI



2 WHY IS HOME-BASED PRIMARY CARE IMPORTANT, AND WHY DOES THAT MATTER FOR MEDICAL EDUCATION?

- Home-based primary care is immensely helpful for people with significant functional limitations- transportation is often a barrier for patients who receive home-based care ¹
- 40% of visits in the 1930s were house calls- that number drastically fell as insurance reimbursements decreased, but the growing older population has called into focus the need for a home-based model ³
- Homebound patients with home-based primary care have fewer ED visits and hospital admissions ²
- Higher usage of home-based services is associated with better patient outcomes ²
- Home visitation is an effective way for medical students to understand the importance of primary care while being able to observe patients in their own environment ⁴
- Participation in home health services is not currently included in the UVM Larner College of Medicine Family Medicine Clerkship

3 THE IMPACT OF HOME-BASED PRIMARY CARE

- Local:
 - In a small study in Burlington, VT, 38% of patients reported fewer visits to the Emergency Department while being the recipient of home visits from their physician ¹
 - Patients have cited quality of care and convenience as reasons they value home visits from their physicians ¹
- Nationwide:
 - 23% reduction in hospitalizations and 27% decrease in 30-day readmissions if patient enrolled in home-based primary care ³
 - Cost savings of \$111 per beneficiary per month, which amounts to \$70m savings over three years ³

4 PERSPECTIVES FROM PROVIDERS

- Interview with Dr Megan Malgeri, attending physician at UVMHC Milton Family Practice
 - She does 4-8 home visits per month- each attending has some flexibility to determine how many home visits they would like to schedule
 - Most of her patient population is homebound with severe disability and medically complex issues
 - The most valuable part: the “intimacy of the experience” and psychosocial context
- Interview with Dr Katrina Sexauer, PGY2 Family Medicine Resident at UVMHC
 - Residents do 2-3 home visits during their outpatient month
 - They can select out of their patient panel to choose someone who would benefit from a home visit
 - The most valuable part: learning about the environmental aspects that make it harder to access care, and seeing a patient in their home environment

5 INTEGRATION OF HOME-BASED PRIMARY CARE IN MEDICAL EDUCATION

- The Plan:
 - Work with Dr Malgeri to find a date and time of a resident home visit
 - Participate in a half-day home visit session, observing home environment of the patient while participating in the visit
 - Reasons for house calls vary- assessing for geriatric syndromes (recurrent falls, polypharmacy, frailty, memory loss), evaluating for suspected elder abuse, injury prevention and home safety, and many more ³
 - Checklist on next slide included as a guideline for safety evaluation
 - Create a precedent for future clerkship students based in Milton to participate in a home-based care session during their family medicine clerkship

TABLE 6

Home Safety Assessment**Bathroom**

Are handholds sturdy and in appropriate places?

Can the toilet seat be reached?

Does the bathtub or shower have a nonslip surface?

Is the bathroom floor slick?

Drug use

Is there evidence of tobacco, alcohol, or other illicit drug use in the home?

If yes, is the substance used by the patient or other inhabitant of the home?

Electrical cords/appliances

Are cords frayed or damaged?

Do cords cross walking paths?

Emergency actions/evacuation route

Are emergency numbers available?

Does the patient carry on their person a mode of contacting emergency services (e.g., bracelet or necklace that alerts emergency personnel, cell phone)?

Are do-not-resuscitate and do-not-intubate forms displayed in a location easily spotted by emergency service personnel?

Are there means of egress from home?

Firearms

Are firearms present?

If yes, are they secured? (e.g., gun lock, locked case or cabinet, weapon and ammunition separated)

Who knows how to access?

Fire extinguishers

Are fire extinguishers present?

If yes, are they accessible and in working order?

Is the patient or caregiver able to use them?

Heating and air conditioning

Are controls accessible and easy to read?

Is the home an appropriate temperature year-round?

Hot water heater

Is the temperature set below 120°F (49°C)?

Kitchen safety (especially gas stoves)

Is it easy to tell if a burner is on or open gas flame is present?

Does the patient wear loose garments while cooking?

Where is food stored? Is the food expired?

Lighting and night-lights

Is lighting present and sufficient throughout the main living spaces?

Loose carpets and throw rugs

Are carpets and throw rugs present?

If yes, do they need to be secured or removed to prevent falls?

Pets

Are pets present?

If yes, are they easy to care for?

If yes, are they likely to be a fall hazard?

Smoke detectors and carbon monoxide monitors

Are they present?

If yes, are they functioning and monitored?

Stairs

Does the home have external or internal stairs?

If yes, are they carpeted and is the carpeting secured?

Are the stairs well lit?

Are there railings?

Are assistive devices (ramps, chairlifts) present or needed?

Tables, chairs, furniture

Is the furniture sturdy, balanced, and in good repair?

Utilities

Are the systems monitored and maintained?

Water source

Is water from a public source or a well?

Is the source functioning and safe?

Adapted with permission from Unwin BK, Tatum PE III. House calls. Am Fam Physician. 2011;83(8):929.

OBSERVATION OF HOME SAFETY

- Medical students are uniquely positioned to observe the surroundings during a visit
- Checklists, such as this one, are helpful to organize an assessment of the safety of someone's home ³
- This checklist has great suggestions for what to keep in mind when evaluating someone's home, even if you don't follow every step of it

6 HOW DID IT GO?

- I attended two home visits on an afternoon with Dr Malgeri and a PGY3 resident
 - We packed up supplies (printed medication lists, flu shots, blood pressure cuffs and other equipment) and headed out in a caravan (due to COVID, sadly no carpooling this time)
 - The first visit- a safety check-in:
 - We got to see how the patient ambulated in and around their home, and were able to ask about the interpersonal relationships in the home
 - We also discussed a few of the patient's health concerns, set up a referral and follow-up, and gave them a flu shot
 - The second visit- a hospital follow-up:
 - A home health RN happened to be there when we came, so we got an impromptu interdisciplinary team meeting!
 - We got to assess for gaps in care, ask the patient their goals of care, and touch on longitudinal plans for chronic disease management
- The most valuable part:
 - Great teamwork, seeing patients in the contexts of their lives, and hearing about how happy the patients were about the home visit model! Bonus- adventuring around Vermont in the Fall!

7 EVALUATION OF EFFECTIVENESS AND LIMITATIONS

- Evaluation:
 - Check in with each student who participates in a home visit and ask:
 - What was the most valuable part about this experience?
 - Is there anything you would like to change about this experience?
- Limitations:
 - Creating longitudinal programs as an ever-rotating clerkship student is challenging

8 FUTURE DIRECTIONS

- Simplify the home safety checklist to allow medical students to easily evaluate the safety of a patient's home while participating in a visit
- Extend involvement to all family medicine clerkship students, regardless of site
 - Opt-in involvement for the first 2-3 years
 - Goal of 100% clerkship student involvement
- Create relationship with the VNA, Bayada, or other home health services to provide opportunities for medical students to participate in interdisciplinary home care
 - Medical students could choose between participating in a resident-led home visit or a nurse-led home visit
 - Creating this relationship would be a productive FM Clerkship Student Project in its own right

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