

Home Health Care Patient/Worker Health and Safety Issues

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Outline

- Introduction
- Two Sources of Hazards in Home Healthcare (HHC)
- Two Populations at Risk
- Household Safety Checklist
- Findings from Pilot Study
- Next Steps

Introduction

*“Homes are designed for living....
not for providing healthcare.”*

(Lang and Edwards, Safety in Home Care: Broadening the Patient Safety Agenda to Include Home Care Services, 2006)

In Home Healthcare

- Two sources of hazards:
 - The household environment
 - AND
 - Those typically associated with the delivery of healthcare
- They may act individually AND synergistically to impact
 - Worker Health and Safety AND Quality
 - Patient Health and Safety AND Quality

Households Can Be Unsafe Environments

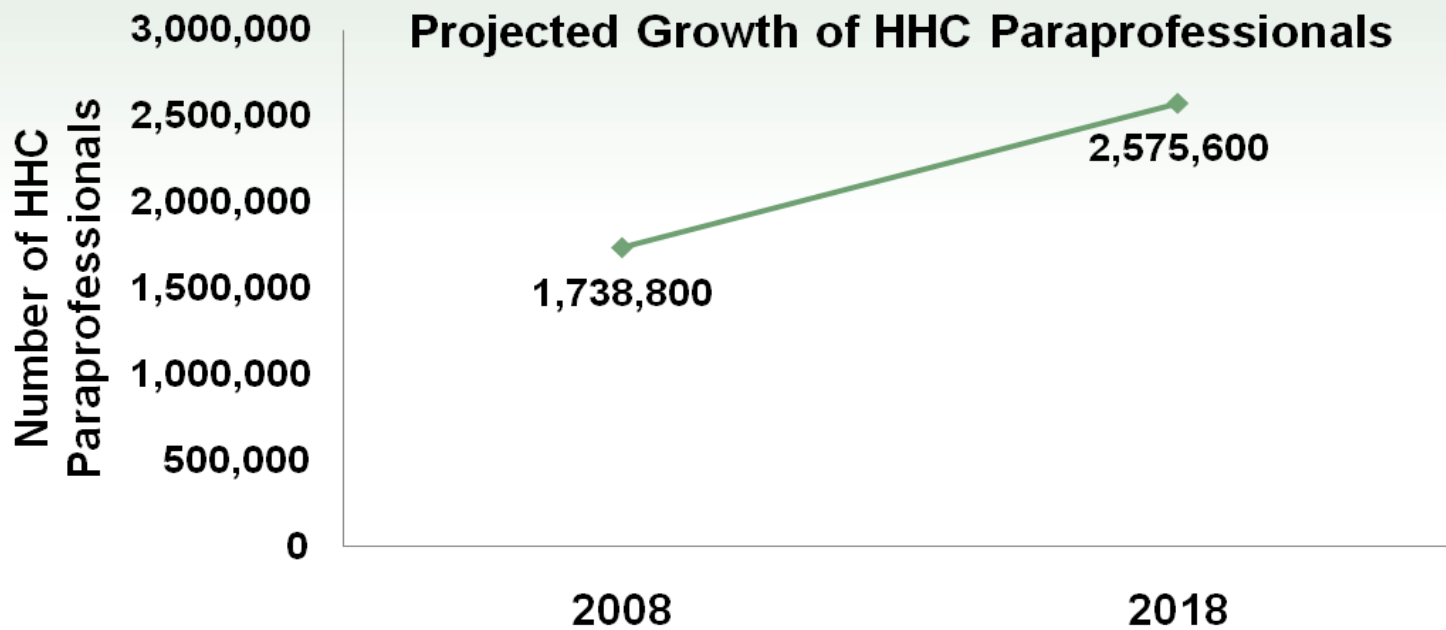
- Each year,
 - **42,000** unintentional fatalities
 - **15,000** Americans, aged 65 and older
 - **Falls, fire/burns**, poisoning, airway obstructions, and drowning
 - **12 million** disabling injuries
 - **40% Falls**
 - **\$150 billion/ year** in medical care alone

Healthcare-related Hazards can affect Worker Safety, Patient Safety... and Quality

- Healthcare- related hazards for Workers
- Healthcare- related hazards for Patients:
 - Falls
 - Medication errors
 - Skin ulcers
 - Nosocomial spread of infectious agents
 - Resistant organisms
 - Both old and new technologies
 - Medical Errors and Medical Mismanagement 6

Significance

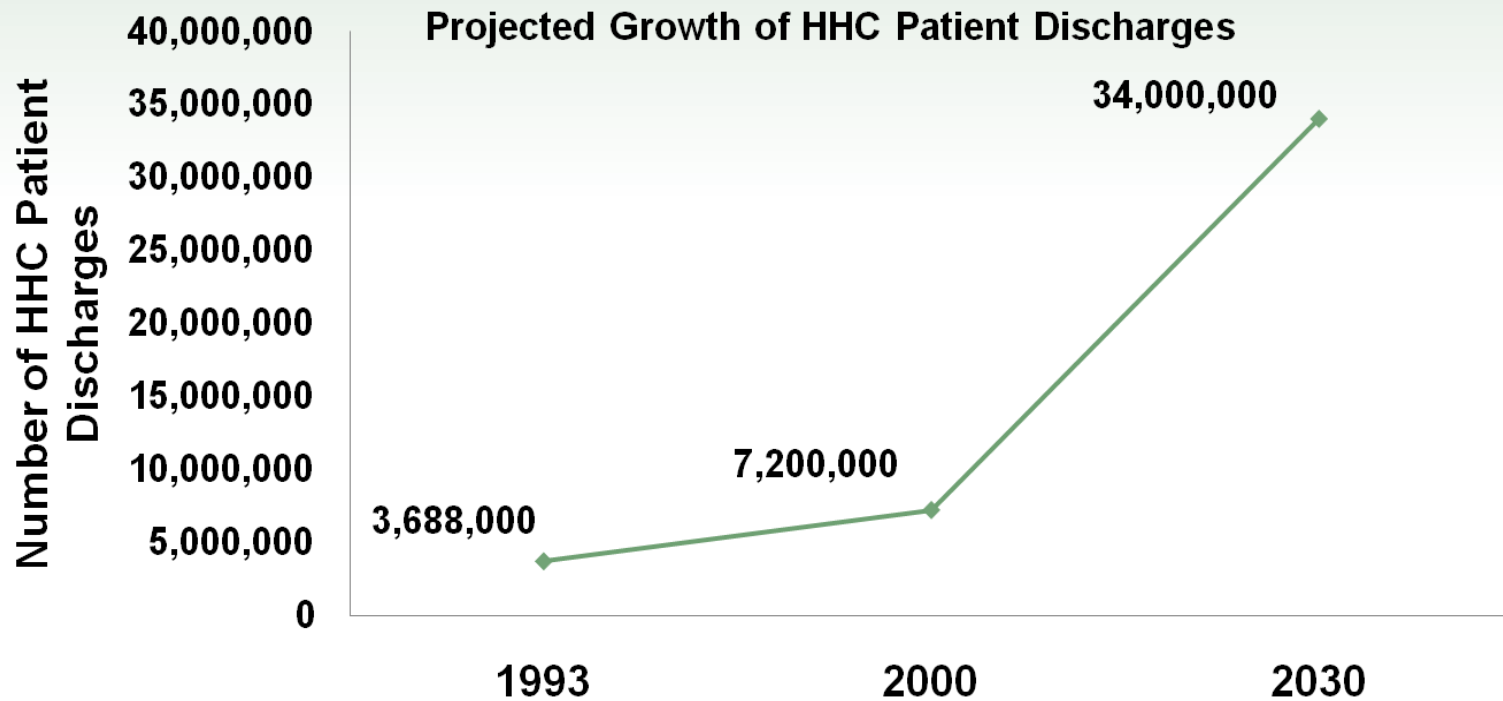
- Home Healthcare (HHC) is the **fastest** growing healthcare sector in the US.
- There are **1.7 million** HHC paraprofessionals – an occupation projected to grow by **48% by 2018**.



Source: Bureau of Labor Statistics; Occupational Outlook Handbook, 2010-11 Edition

Significance

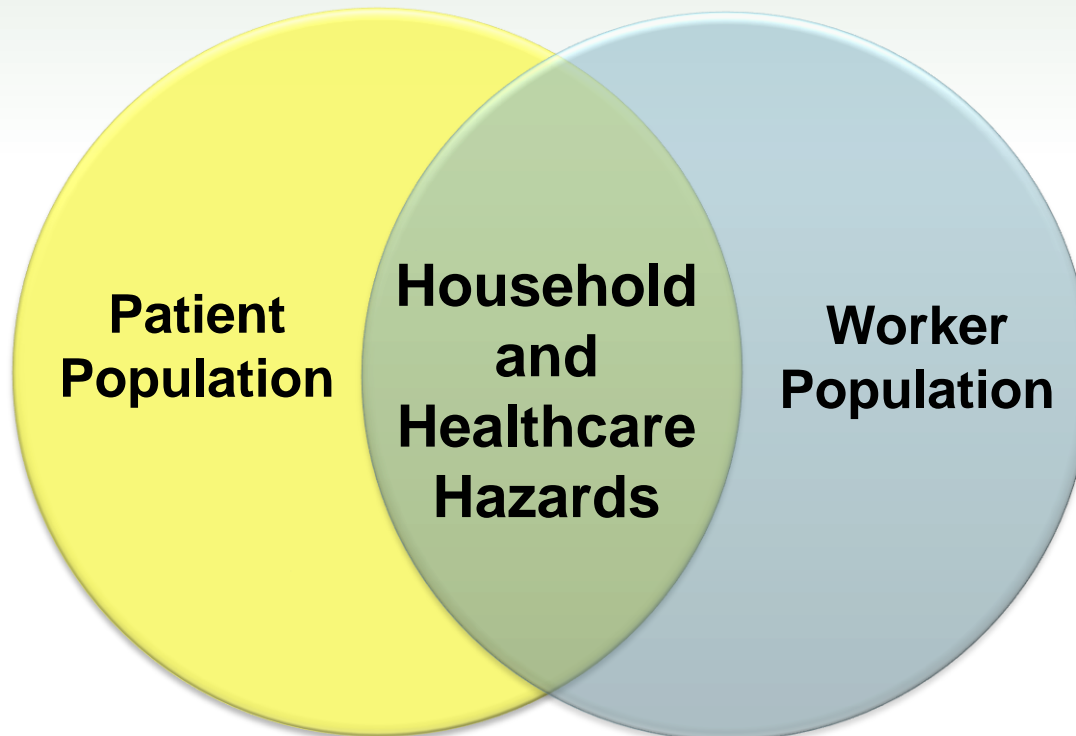
- **8-12 million** individuals in the US are enrolled in formal HHC, a number that will increase as the general population ages. Important **high risk transition zone**. (\$17B)



Significance

Compared to hospitals....

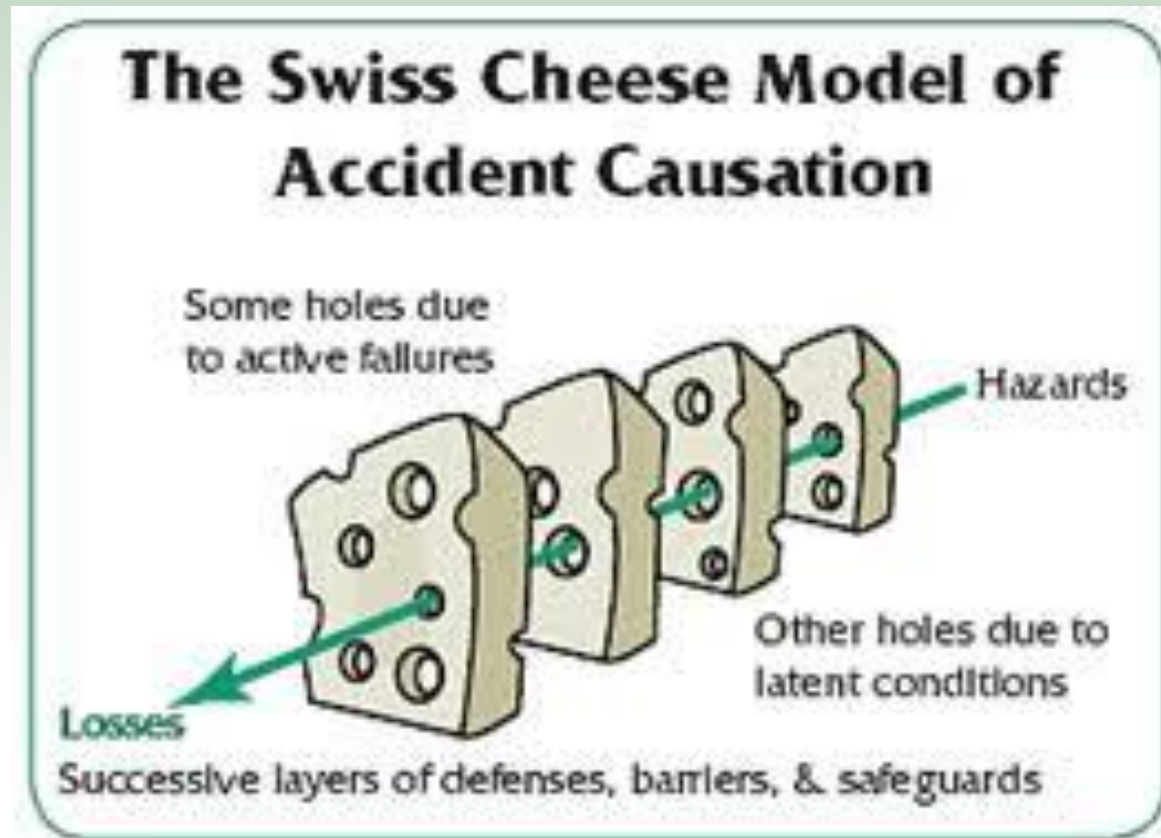
- Lack of regulatory oversight, less structured, more unpredictable, combined with suboptimal/lacking safety resources (safety/infection control staff, supplies, and safety equipment) can **increase the risk** of adverse events.



Factors * Impacting HHC Safety- for both patients and workers

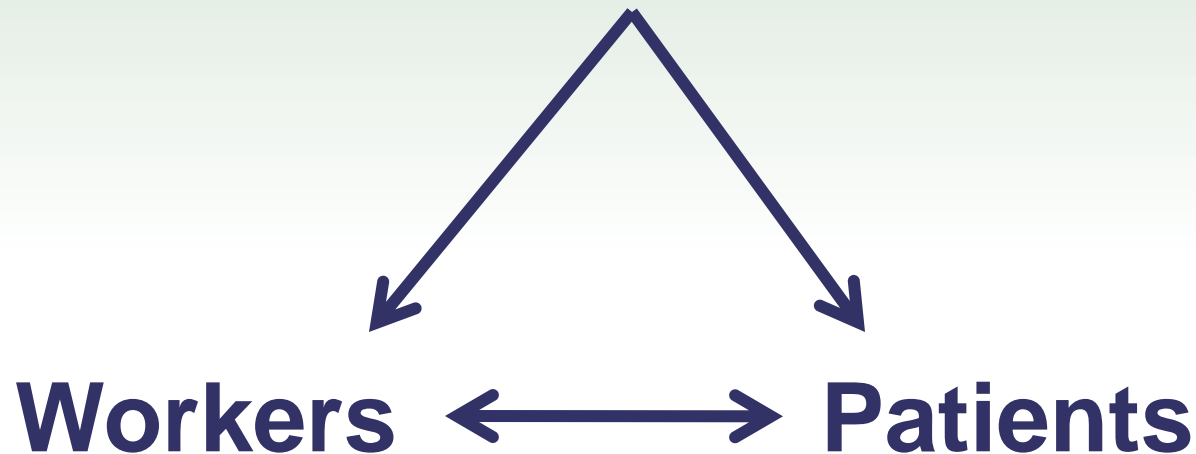
- External Environment
 - Management
 - Physical Environment
- Medical Devices and New Technology
 - Social/Community Environment
 - HHC Tasks
 - Provider Characteristics
 - Patient Characteristics

Reason's Swiss Cheese Model



Reason J, *Human error: models and management*,
BMJ, Volume 320, Number 737, 18 March 2000.

Hazards in the household and Hazards Associated with Healthcare



Risk Management

**Reduce adverse outcomes by
reducing risk**

Safety Management and Engineering

Identification of Hazards



Remediation of Hazards



Risk Reduction

Development of a HHC Household Safety Checklist to easily identify hazards



*Funded by The Agency for Healthcare Research and Quality (AHRQ)

Colleagues

- Maureen Dailey, RN, DNSc: National Center for Nursing Quality, American Nurses Association
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- Peri Rosenfield, Ph.D., Visiting Nurse Service of New York
- Susan Klitzman, DrPH, MPH, Director of Urban Public Health Program, Hunter College

HHC Household Safety Checklist

Ideal tool would be...

- Easy to use
- Inexpensive
- Easy to adapt
- Target the most important hazards
- Guide the implementation of remediation steps

HHC Household Safety Checklist Pilot Study

- Designed for paraprofessionals
- Training program, 1 hour
- 50-item checklist– targeted households of elderly patients
 - Falls hazards
 - Fire/electrical hazards
 - Biological/sanitary hazards
 - Miscellaneous hazards, including threat of violence
- Fact Sheet for low/ no cost- remediation
- Safety “goody bag”
- Pilot tested in 116 patient homes

Training Slides: Household Hazards



Excessive Clutter



**Signs of Rats or
Mice**



**Flammables Near
Stove Top**



Mold or Fungus

Household Safety Checklist

Today's Date: _____

Did your patient sign the Consent Form: Yes What time did you start the survey? _____

A. Information on your patient:

1. Age: _____
2. Gender (M/F): _____
3. Can your patient walk without help (e.g., a person or thing)? Yes No
4. What is your patient's overall health status (circle): Poor Fair Good Excellent
5. How many people live in the home: _____ Please list them: _____
6. Do you know the medicines (prescription & nonprescription) your patient takes daily? Yes No N/A
7. How does your patient keep track of their medicines now?
 - "Pre-poured" or placed in a pillbox (see picture)
 - Medicines lined up
 - Other method
 - No method to keep track
8. Does patient keep any medicine in the home that they are no long taking? Yes No
9. Does the patient use a hearing aid? Yes No

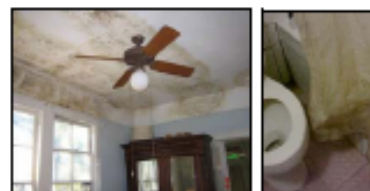


B. Please check if any of these hazardous conditions or safety risks ARE found in your patient's home:

10 Poor lighting



13 Mold or fungus



11 Loose or worn-out rugs or carpets



14 Dangerous space heater (uses flammables)



12 Uneven or slippery floors



15 Dangerous electrical cords (easily tripped over, overloaded outlets, damaged cords)



16 Excessive dust or animal hair



21 Cleaning products and other potential poisons that are not in the original containers (original labels are not in place)



17 Awkwardly placed furniture (blocking exit)



22 Non-food and food items kept in same cabinet



18 Excessive Clutter (It might block the exit out)



23 Stove knobs hard to reach



19 Food not generally stored in a sanitary manner



24 Flammables (towels, curtains, paper) near stove tops



20 Trash builds up in the home



25 Rotten food or milk in the home



26 Threat of violence, like aggressive dogs and other pets, neighbors, or weapons



28 Excessively loud noise in the home (from inside or outside the home or apartment)



27 Doors are lacking good lock (e.g., dead bolts, chain lock, peep hole, etc.)



29 Signs of cockroaches in the home



30 Signs of other bugs in the home like bed bugs, fleas, or lice

Bed Bugs:



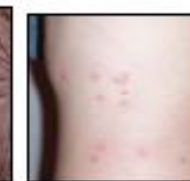
Bed Bug Bites:



Lice:



Flea Bites:



31 Signs of rats or mice in the home



32 Unsafe use of smoking materials





C. Please check if these safety items ARE PRESENT in your patient's home:

33 Carbon monoxide alarm in the home









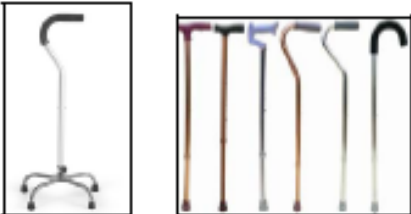
34 Smoke alarm in the home



<p>35 <input type="checkbox"/> Grab bars to get In/out of the shower/bathtub</p> 	<p>36 <input type="checkbox"/> Non-slip shower mat or pads in the shower/bathtub</p> 
<p>38 <input type="checkbox"/> Fire extinguisher in the home</p> 	<p>39 <input type="checkbox"/> Non-slip rug on the bathroom floor next to the shower/bathtub</p> 
<p>37 <input type="checkbox"/> If yes, is the pressure gauge arrow in the green section (i.e., is it working)</p> 	<p>40 <input type="checkbox"/> Emergency contacts list available (e.g., family, doctor, superintendent, etc)</p> 

D. Please check if the following safety and medical devices ARE in your patient's home:

<p>41 <input type="checkbox"/> Safe lifting device If yes, have you been trained to use it? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 	<p>42 <input type="checkbox"/> Needles and other sharps If yes, is there a sharps container? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 
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<p>43 <input type="checkbox"/> Oxygen tank If <u>yes</u>, were you trained to use/store/handle it? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 	<p>47 <input type="checkbox"/> Ventilator If <u>yes</u>, were you trained to assist patient in its use? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 
<p>44 <input type="checkbox"/> Portable toilet If <u>yes</u>, were you trained to assist patient in its use? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 	<p>48 <input type="checkbox"/> Nebulizer If <u>yes</u>, were you trained to assist patient in its use? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 
<p>45 <input type="checkbox"/> Wheelchair If <u>yes</u>, were you trained to assist patient in its use? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 	<p>49 <input type="checkbox"/> Walker If <u>yes</u>, were you trained to assist patient in its use? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 
<p>46 <input type="checkbox"/> Cane If <u>yes</u>, were you trained to assist patient in its use? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> 	<p>50 <input type="checkbox"/> Other Please list: _____ If <u>yes</u>, were you trained to assist patient in its use? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

Results

- Pre/ Post testing revealed that the training was effective (N= 54 aides)
- Qualitative Results:
 - Easy to use
 - Fact sheet useful
 - Patients/ families were positive
 - Visual inspection took < 10 minutes
- Quantitative Results:
 - 83% of households had 1 or more hazards

Results, quantitative

Fire/ Electrical hazards

- No fire extinguishers
- No carbon monoxide detectors
- No smoke alarms
- Electrical cords

Falls hazards

- Lack of “No slip” materials
- No grab bars
- Worn/torn rugs
- Slippery flooring
- Excessive clutter

Results, quantitative

Biological/Unsanitary Conditions

- Cockroaches
- Rats/Mice
- Bedbugs, lice
- Rotten Food
- Improper
chemical storage

Miscellaneous Hazards

- No emergency
contacts lists
- Loud noise
- Unsafe locks
- Threat of
violence

Next Steps

- Next iteration of checklist*
- 100 households of elderly community members
- Grad student teams are conducting safety survey and remediation, with follow-up work orders
- Pre/post data on adverse incidents in community members
- Future work planned for impact of both process of inspections and interventions on workers' health and safety

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Thank you!

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