

Pharmacy 492
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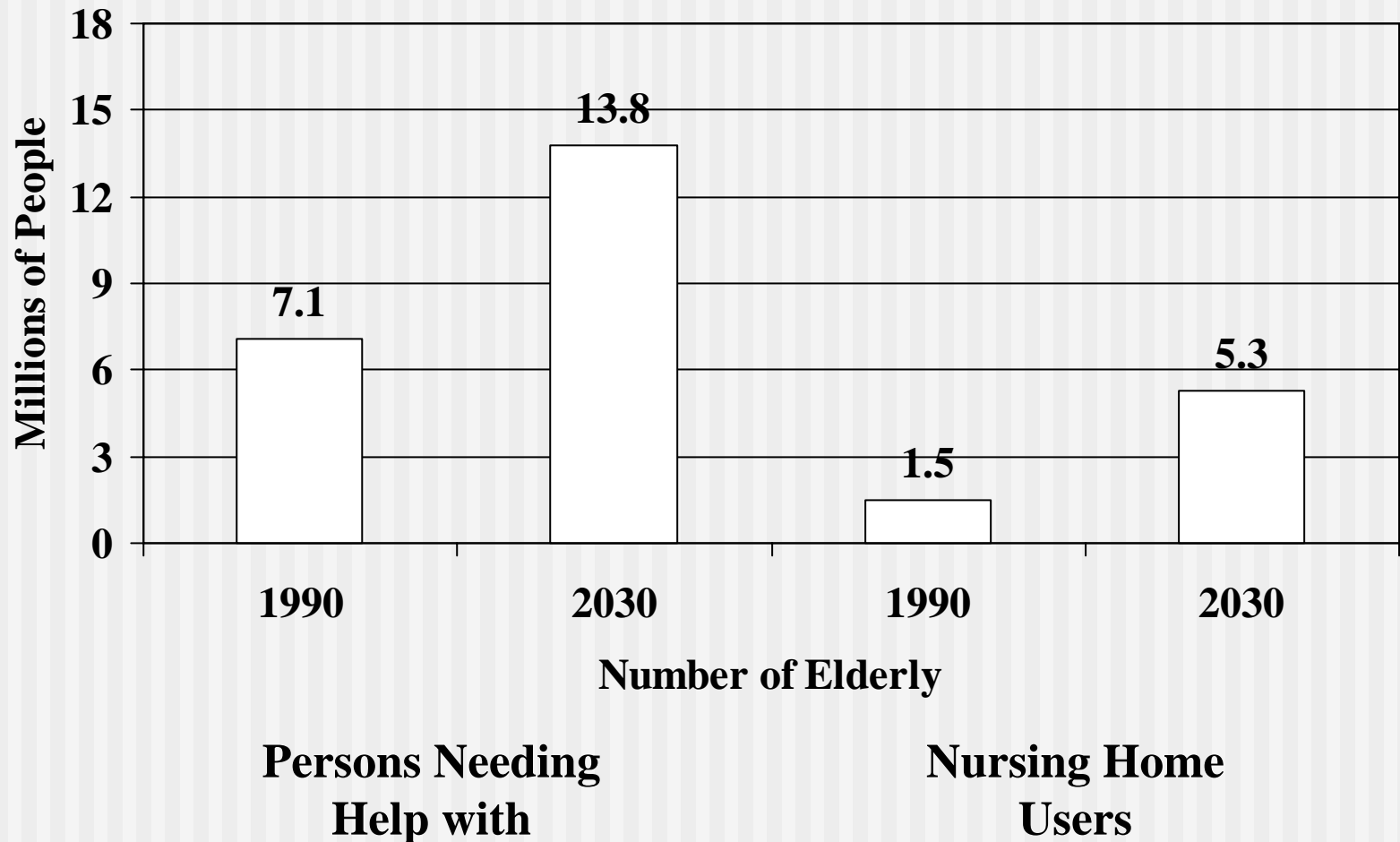
Clinical Pharmacy Services in Long-term Care Facilities

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Objectives

- Clinical needs of the elderly population
- Pharmacist activities in LTC
- Drug regimen review (DRR)
- Monitoring criteria
- Communicating clinical interventions and recommendations

Number of Elderly Needing Long-Term Care 1990 and 2030



Clinical Needs

- Fastest growing segment of population
- Multiple disease states
- Multiple medications
- Reduced organ reserve capacity
- Greater risk of adverse drug reactions
- Most regulated industry

Percent of Over 65 Population in Selected Age Group

Year	65-74	75-84	85 years and over
1995	56.1	32.3	11.6
2010	53.4	30.0	15.5
2020	59.5	27.7	12.8
2030	54.9	32.8	12.4
2050	46.1	31.6	22.3
2080	44.6	31.7	23.7

Pharmacist Activity in LTC

- Drug regimen review (DRR)
- Health Initiative Programs
- Psychoactive Meetings
- In-service education
- Quality Assurance Committee Meetings
- Medication pass observation
- Medication storage review

Drug Regimen Review

- Federal indicator for use of “unnecessary drugs”
 - Corresponding diagnosis for each medication
 - Appropriate dose and duration
 - Adverse drug reactions
 - Adequate monitoring
- Identify drug-related problems

Clinical Monitoring

- Drug effectiveness
- Drug utilization
- Adverse drug reactions
- Appropriate laboratory data for monitoring
- Pharmacokinetic dosing
- Psychotropic drug monitoring

Types of Drug Regimen Reviews

- General review
 - Review all medications for appropriateness
- Focused review
 - Specific disease state or medication therapy

General Drug Regimen Review

- Review problem list
- Review current physician order sheet and telephone orders
- Confirm diagnosis for each medication
- Review laboratory data
- Review progress notes for assessments
- Review MAR for utilization & compliance

Example

- Pharmacist receives an order for a new hypertension medication for a resident in a nursing facility:
Lisinopril 10 mg QD
- What are some information the pharmacist should look up before processing this order:
 - Other hypertension meds currently on profile and adherence
 - Blood pressure control in the past 3-6 months
 - Renal function, drug allergy
 - Any past reports of dizziness, falls, unsteady gait

General Drug Regimen Review

- Advantages:
 - Identify all medication related problems
 - Screens residents for:
 - appropriate drug use
 - duplication of therapy
 - drug/drug, drug-disease, drug/food interactions
 - adverse drug reactions
 - Process-fast

General Drug Regimen Review

- Disadvantages:
 - Repetitive
 - May not offer detailed review
 - Process-oriented instead of focusing on resident care issues

Focused Drug Regimen Review

- Choose disease state or problem
- Review current therapy
- Review therapeutic outcomes
- Identify possible cause of therapy failure

Example

- Pharmacist receives an order to increase a patient's lisinopril dose from 10 mg QD to 10 mg BID.
- What kind of drug regimen review should be done?
- What are some of the parameters the pharmacist should examine?

Example cont'd

- In addition to list of actions suggested for general drug regimen review, the pharmacist should consider additional review of:
 - Reasons for increase in dose: BP control, concurrent health problems and changes
 - Review patient's lifestyle and adherence to medications
 - Review adverse drug events, potential for drug/disease/OTC herbal interactions
- Other actions to be taken:
 - Formulate and implement follow-up care plan with facility or patient

Focused Drug Regimen Review

■ Advantages

- Provides variety and challenge
- Enhances knowledge in specific disease or medication therapy
- Outcome-oriented

■ Disadvantages

- Time-consuming
- Potentially overlooks other problems

Drug Regimen Review Pearls

- Resident specific
- Proactive
- Comprehensive
- Interdisciplinary
- Systematic

Health Initiative Programs

- Focus on disease state management
- Examples:
 - Heart failure
 - Atrial fibrillation
 - Depression
 - Osteoporosis
 - Hyperlipidemia

Health Initiative Programs

- Identify “at risk” residents
- Goal:
 - Optimize existing care
 - Identify untreated diseases
 - Decrease total cost of care
 - Increase overall quality of care

Formulary issues

- Geriatric Pharmaceutical Care Guidelines
 - Information on drug products in a therapeutic class to best serve needs of the elderly
 - Clinical evaluations based on pharmacokinetics, efficacy, safety, toxicity, patient considerations
 - Relative cost of drug products within a therapeutic class
 - Physicians prescribing drugs clinically rated as preferred has resulted in improved health care and cost savings for residents

Clinical Intervention Outcomes

- Terminate unnecessary medications
- Correct drug-related problems
- Simplify dosing regimens
- Provide cost savings
- Add needed medications that were not being used

Communication of DRR reports

- Present the problem with supporting data
 - Data from nurses, medical records
 - Concise and brief
- Present recommendations
 - Be diplomatic and non-threatening
 - Examples of statements:
 - “Perhaps consideration might be given to...”
 - “Please consider...”
 - “If clinically warranted...”
 - “This appears to be a potential problem...”

Communication of DRR Reports

- Be prepared to cite references
 - Provide evidence
- Thank physician for considering recommendations

In-service Education

- Effective way to impact drug therapy by providing education to nursing and other facility staff
- Topics should be tailored to meet specific needs of the facility
- Keep in-service short, simple, and practical

Quality Assurance Meetings

- Discuss policies and procedures to help ensure resident receives best possible care and gives staff solid direction about how to handle unfamiliar or difficult situations
- Discuss Problems/Trends
- Work with medical director and other disciplinary team members
- Networking opportunities to share drug therapy topics with other members

Medication Storage Review

- Performed by consultant pharmacists or nurses
- Check treatment cart for date, proper separation of medications, proper labeling
- Check refrigerator for proper temperature, outdated medications
- Check medication room for any items that should not be stored there
- Check E-kit

Medication Pass Audits

- Right medication, strength, patient, dose, time given
- Proper administration of medication (i.e., crushing medications when inappropriate)
- Other issues: hand washing, locking medication carts, resident rights

Being a Consultant Pharmacist

- Flexible scheduling
- Variety in schedule
- Personal and professional challenge

Being a Consultant Pharmacist

- Strong professional support
 - Teamwork, call for help
 - Monthly consultant meeting to share experiences, problem solve and team building
 - Resources: journals, published articles, audio and video tapes for continuing education
 - Free continuing education programs for pharmacists