







South Dakota Law

- ▶ 36-11-19.1. Authority of registered pharmacists. Registered pharmacists may:
- ▶ 6) Initiate or modify drug therapy by protocol or other legal authority established and approved within a licensed health care facility or by a practitioner authorized to prescribe drugs

Workflow continued

- ▶ Check in with Patient Access Representative
- ▶ Perform fingerstick INR reading
- ▶ Assess patient for changes in health and/or medications
- ▶ Adjust warfarin per practice agreement algorithm if needed
- ▶ Schedule follow up

Anticoag Clinic with Nurse Involvement

- ▶ Pharmacist and Nurse
 - ▶ Skype or phone for the remote clinic
- ▶ Practice agreement and protocol
- ▶ Nurse handles patients considered controlled
- ▶ Hospital based
- ▶ All results go to pharmacy queue to be reviewed
- ▶ All visits go to provider for cosign

Nurse Protocol

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    graph TD
      Start([INR 2.0-2.2 or 4.1-4.5]) --> Box1[Previous INR 2.5-3.5]
      Start --> Box2[Previous INR 2.1-2.4 or 3.6-4.4]
      Start --> Box3[Previous INR 42.0 or 24.5]
      Start --> Box4[Previous INR 2.3-4.4]
      
      Box1 --> Action1[Adjust dose by 1 level on Warfarin Dosing Table and repeat INR in 2 weeks]
      Box2 --> Action2[Refer for management by anticoagulation pharmacist or provider]
      Box3 --> Action3[Hold x 1 dose, decrease dose by 1 level on Warfarin Dosing Table, & repeat INR in 1 week]
      Box4 --> Action4[Refer for management by anticoagulation pharmacist or provider]
      
      Box1 --> Box1a[Out of range < 8 weeks]
      Box1 --> Box1b[Out of range > 8 weeks]
      Box2 --> Box2a[Out of range < 8 weeks]
      Box2 --> Box2b[Out of range > 8 weeks]
      Box3 --> Box3a[Out of range < 8 weeks]
      Box3 --> Box3b[Out of range > 8 weeks]
      Box4 --> Box4a[Out of range < 8 weeks]
      Box4 --> Box4b[Out of range > 8 weeks]
      
      Box1a --> Action1
      Box1b --> Action1
      Box2a --> Action2
      Box2b --> Action2
      Box3a --> Action3
      Box3b --> Action3
      Box4a --> Action4
      Box4b --> Action4
  
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5 mg	2.5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	32.5 mg
5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	35 mg
5 mg	7.5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	37.5 mg
5 mg	7.5 mg	5 mg	5 mg	5 mg	7.5 mg	5 mg	40 mg
7.5 mg	5 mg	7.5 mg	5 mg	7.5 mg	5 mg	7.5 mg	45 mg
7.5 mg	5 mg	7.5 mg	7.5 mg	7.5 mg	7.5 mg	7.5 mg	50 mg

Challenges

- ▶ Provider Involvement
 - ▶ Antibiotics
- ▶ Compliance
 - ▶ Patients are not always used to the regular monitoring
 - ▶ Rural location, some people have a hard time getting in
- ▶ Charging
- ▶ Scheduling
- ▶ Managing follow up
- ▶ Staffing
- ▶ Decreasing number of patients

Benefits

- ▶ Instant results, see the INR and the patient at the same time
- ▶ Easy to assess patient, compliance and health status
- ▶ Convenient
- ▶ Face to face is better than over the phone and after the fact
- ▶ Improved our Time in therapeutic range
 - ▶ 60.7% at the beginning to 70.3% now
- ▶ Increased Patient satisfaction
- ▶ Patient education

Level of Service

- ▶ Level 1: 99211
 - ▶ Established patient, in range
- ▶ Level 2: 99212
 - ▶ Established patient, out of range
- ▶ Level 3: 99213
 - ▶ Established patient, bridging or antibiotic help
- ▶ Level 4: 99214
 - ▶ New patient

Where to start

- ▶ Don't reinvent the wheel
 - ▶ Visit other clinics
 - ▶ Practice agreements
 - ▶ Protocols
- ▶ Talk to providers and administration
- ▶ Need involvement from lots of department
 - ▶ Scheduling, lab, compliance, nursing, coding...
- ▶ Training
- ▶ Prep your patients

New opportunities

- ▶ New Anticoagulants
- ▶ Imagenetics
 - ▶ Incorporating testing for CYP2C9, VCORC1, and CYP4F2

PAI: Services in Two Rural Hospitals

Alyssa Osborn Howard, Pharm.D.

Pharmacist Learning Objectives

- ▶ Identify the components of ASHP's Practice Advancement Initiative as it applies to the pharmacist in the hospital setting.
- ▶ Outline barriers to advancing pharmacy practice in a rural setting.
- ▶ Define the potential role of the pharmacist in a rural hospital setting.

Pharmacy Technician Learning Objectives

- ▶ Describe the components of ASHP's Practice Advancement Initiative as it applies to the technician in the hospital setting.
- ▶ List the most common barriers to advancing pharmacy practice in a rural setting.
- ▶ Define the potential role of the pharmacy technician in a rural hospital setting.

▶ I have had no financial relationship over the past 12 months with any commercial sponsor with a vested interest in this presentation.

Practice Advancement Initiative

- ▶ "The goal of this initiative is to significantly advance the health and well being of patients by supporting futuristic practice models that support the most effective use of pharmacists as direct patient care providers."¹
- ▶ "All patients should have the right to the care of a Pharmacist."¹
- ▶ Create framework and recommendations for replicating forward thinking services that are measurable and successful.²

ASHP Hospital PAI—Goals and Barriers

- ▶ ↓ Hospital Costs
- ▶ ↑ Efficiency of Services
- ▶ All hospitals and health systems will **not** require the same amount of pharmacist provided drug therapy management

- ▶ Lack of leadership support
- ▶ Lack of pharmacist/technician resources
- ▶ Lack of technological resources
- ▶ State Laws¹
 - ▶ Scope of practice

ASHP Ambulatory Care PAI—Goals

- ▶ Develop sustainable relationships with patients
- ▶ Practicing in the context of family and community
- ▶ Interprofessional relationships and continuity of care
- ▶ Provider Status
 - ▶ Financial support for positions
- ▶ Measurable and meaningful impact³

Rural Pharmacy Practice—Goals and Barriers

- ▶ Blend of Hospital and Ambulatory Care Practice
 - ▶ Evaluate what patients and facility need
 - ▶ Gain trust of providers—without this, you can go nowhere!
 - ▶ Develop plan that is translatable to multiple audiences
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- ▶ Lack of financial resources
 - ▶ Lack of staff (Pharmacists and Technicians) willing to work in rural
 - ▶ Workload
 - ▶ Lack of “buy in”
 - ▶ Understanding billing differences

Community Memorial Hospital Avera

- ▶ Inventory Management
- ▶ Outpatient Anticoagulation Clinic
- ▶ Antibiotic Stewardship Program—Community Wide
- ▶ Clinic Consulting
- ▶ Telepharmacy
- ▶ Continuous Glucose Monitor Placement
- ▶ Chronic Care Management
 - ▶ Transitions of care/readmission focus program

Inventory Management

- ▶ Pharmacist on-site allowed for closer management
 - ▶ This measurable cost savings was unpredicted when campaigning for onsite pharmacist
- ▶ -\$90,000 savings over 3 years
- ▶ Technician assistance here is crucial!

Outpatient Anticoagulation Clinic

- ▶ Started in January 2015
- ▶ Ran out of hospital--outpatient service
 - ▶ Primarily Medicare patient base
- ▶ POC PT/INR test, 15 minutes with Pharmacist
- ▶ Bill 99211 Pharmacist visit, POC PT/INR test
- ▶ ~500 visits/year
 - ▶ ~\$50,000 added yearly revenue for facility

Antibiotic Stewardship Program--Community Wide

- ▶ Started in 2014
 - ▶ Initiated in conjunction with DOH and consulting company
- ▶ Local antibiogram formation
- ▶ Community Wide Program
 - ▶ Nursing Homes, Retail Pharmacy, Hospital, Clinic, SDDC
- ▶ 40% reduction of fluoroquinolone prescribing in clinic setting
- ▶ 10% improvement in MRSA resistance
- ▶ 8% improvement in E. Coli resistance
- ▶ Cost savings in Pharmacy purchases
- ▶ Increased awareness amongst providers, patients, healthcare facilities

Clinic Consulting

- ▶ Rural Health Clinic—cannot bill
 - ▶ Potential CCM service
- ▶ Medication Reconciliation
- ▶ Insulin Pen Teaching
- ▶ Lovenox Administration Instruction
- ▶ Medication Regimen Consultation
 - ▶ Diabetes, Hypertension, Hyperlipidemia
- ▶ Could provide services through Outpatient—charge through Hospital.
 - ▶ Why Not?

Telepharmacy

- ▶ Approved in 2017
- ▶ Avera St. Luke's—Central Pharmacy
- ▶ CMH Telepharmacy Site
- ▶ Technician operates
 - ▶ Verify Pyxis fill, unit dose, floor stock fill
- ▶ Allows for offsite coverage during week, vacation coverage

- ▶ Plans to implement in Britton within next month

Continuous Glucose Monitor Placement

- ▶ New service will implement within next month
- ▶ Medicare fully pays
- ▶ CGM placement and removal as hospital outpatient service
 - ▶ Cannot bill out of Rural Health Clinic
- ▶ Hospital pays for initial equipment and ongoing sensors
 - ▶ Should see return after 5 placements
- ▶ Charge for placement of sensor
 - ▶ Negative: some insurances may have to pay until deductible met
- ▶ Cannot charge for "reading" of data
 - ▶ Instead will send report to Primary Care Physician and be seen in clinic

Chronic Care Management

- ▶ 2017 became paid service in Rural Health Clinic
- ▶ 2 comorbid conditions, Medicare age, 20 minutes non face-to-face time/month, care plan formation
- ▶ CCM program started in October 2017 at Redfield Clinic
 - ▶ Pharmacist recently started working with program d/t success with coag clinic
- ▶ Developed Pill Box service in conjunction with CCM
- ▶ Approached Medical Staff to achieve buy in
- ▶ "CCM Drive" in Clinic
 - ▶ Newspaper articles, presentation at Senior Center, push in clinic
- ▶ Pharmacist services: discharge appointments, insulin pen teachings, medication reconciliation, clinic services, PT/INR
- ▶ Combining Transitions of Care/readmission program?

Marshall County Healthcare Center Avera

- ▶ Shared Service with CMH
- ▶ Inventory Management
 - ▶ -\$30,000 savings over first year
- ▶ Antibiotic Stewardship Program
 - ▶ Pharmacist expert onsite
 - ▶ Increased education to staff and providers
- ▶ Assisted Living Consulting

Not as many new services developed here—again, remember needs of facility!
(Pyxis reformatting, BMV implementation, policy modification, nursing workflow modification, etc.)

Shared Service with Community Memorial Hospital and Avera St. Luke's

- ▶ July 2016 started shared service between CMH and MCHC
 - ▶ Avera St. Luke's created position employing pharmacist—contracting service
 - ▶ Started 1 day/week at MCHC, rest at CMH
 - ▶ Full time coverage via online support
 - ▶ Now expanded to 2 days/week at MCHC, others at CMH
 - ▶ Telepharmacy created to allow complete coverage of service
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- ▶ Sharing of services allows for deferment of cost
 - ▶ Full burden of salary/services doesn't fall on one facility
 - ▶ Future of Rural Pharmacy is shared services!

Assisted Living Consulting

- ▶ Hospital owned Assisted Living recently chose Avera Long Term Care as pharmacy service
- ▶ Instead of paying Avera LTC for consulting services—they elected to use onsite Pharmacist
 - ▶ Direct access to resource
 - ▶ Allows for improved relations with providers
 - ▶ Continuity of care

Pharmacist Learning Assessment - 1

Learning assessment question: Which of the following are goals of the pharmacist in the hospital setting through ASHP's API?

- ▶ A. All patients should have the right to the care of a pharmacist
- ▶ B. Pharmacists should take part in prescribing as part of a collaborative practice team
- ▶ C. Participation in antimicrobial stewardship
- ▶ D. Participation in telepharmacy duties
- ▶ E. All of the above

Pharmacist Learning Assessment - 2

Learning assessment question: Which of the following is not a barrier to advancing pharmacy practice in a rural setting?

- ▶ A. Access to resources
- ▶ B. Insufficient recognition of pharmacist's ability to contribute to medication services
- ▶ C. Technology support allowing advancement of practice
- ▶ D. Lack of support of hospital administration

Pharmacist Learning Assessment - 3

Learning assessment question:

- ▶ **True / False** - The role of the Pharmacist in a rural hospital setting is a blend of hospital and ambulatory care duties

Technician Learning Assessment - 1

Learning assessment question: Which of the following are suggested duties of pharmacy technicians in a hospital setting through ASHP's API?

- ▶ A. Medication Reconciliation
- ▶ B. Allergy Checking
- ▶ C. Supervising other technicians
- ▶ D. Telepharmacy processes
- ▶ E. All of the above

Technician Learning Assessment - 2

Learning assessment question: Which of the following is not a barrier to advancing pharmacy practice in a rural setting?

- ▶ A. Access to resources
- ▶ B. Insufficient recognition of pharmacist's ability to contribute to medication services
- ▶ C. Technology support allowing advancement of practice
- ▶ D. Lack of support of hospital administration

Technician Learning Assessment - 3

Learning assessment question:

True / False - The role of the Pharmacy Technician in a rural hospital setting may involve more patient care duties, and potentially telepharmacy duties.

Questions?

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References

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