Advanced-Practice Pharmacy Models

PHRM 831
MMMurawski, R.Ph., Ph.D.
What is an ‘Advanced Practice Pharmacist, or an (sometimes) an Advanced Practice Model’”?

• For purposes of comparison to the range of CDTM options out there, an APM is envisioned as being CDTM with:

• Especially broad **responsibility** and **authority** on the part of the pharmacist- a far more “forward leaning” practice, legally defined and including recognized **autonomy** on the part of the R.Ph.

• Includes some form of formal recognition of the pharmacist’s status in excess of standard licensure requirements (e.g., certification)

• Generally less restrictive oversight of the pharmacist’s decision's by the overseeing medical practitioner, or no oversight at all.

• Prescribing is a universal privilege in the APP model

• Sometimes this phenomena is presented in terms of an expanded scope of practice- personally, I see it as a distinctly different model.
The Big Three

• The United States: New Mexico, North Carolina, Montana, and California- (North Dakota, Arkansas; Texas?).

• The United Kingdom: Chocolate AND Vanilla!

• Canada- especially and specifically, the province of Alberta.

• NOTE: California, Washington, Oregon, Mississippi, Florida: Early Adopters of CDTM as per Dr. Snyder-APM is quantitatively & qualitatively different.

• IHS is a special, related case.
CDTM VERSUS APMs

• Slide 14, Dr. Snyder’s lecture: Definition of Collaborative Drug Therapy Management (CDTM)
• “Assume professional responsibility for performing patient assessments”
• APM’s characteristic difference, in day to day practice, if not yet in law:
• “Assume professional responsibility for PATIENT OUTCOMES”
New Mexico

- Became 9th state to pass legislation for CDTM in 1993 with the Pharmacist Prescriptive Authority Act (PPAA)
- PPAA also created a new category – PC-“pharmacist clinician”; includes issue of a legally defined certificate to be posted with practice license.
- Required physical assessment training equivalent to that given Physician Assistants
- Applicants complete 60 hours of board approved physical assessment course, 9 months of supervised clinical experience.
- Able to register with DEA as individuals, as with Washington state, but with substantially greater range and freedom to prescribe those agents requiring a DEA #.
- Use all legend agents in all settings to monitor, assess, prescribe, and modify therapy.
- I think protocols currently required to be registered with the State Board of Pharmacy; must be updated at some regular frequency (sorry, can’t recall specifics and/or possible changes recently).
North Carolina

• Clinical Pharmacist Practitioner Act (CPPA) circa 2000
• CPP- Clinical Pharmacist Practitioner designation; Individual and protocols adopted must be approved by and registered with both Medical and Pharmacy board
• Similar prescriptive authority as NM; NM act was used as a template

(I was, I don’t know, a witness in NM, sort of an assistant mid-wife in NC?)
Montana

- Enacted legislation modeled after the legislation enacted in New Mexico and North Carolina (Hmmm- Consulting Attending MD?).
- Limited population of state and limited number of pharmacists.
- Only a single, small Pharmacy College; may be a while till we get data
California

- Very recently passed legislation similar to these acts;
- According to my sources in New Mexico, used NM’s pharmacy act as a model
- Dovetails with ACOs (Accountable Care Organizations) and ACPPA (Obamacare); may include reducing costs to state Medicaid program as motivation.
- Emerging, evolving story
Why these states?

- The BIG 3 states share certain “profiles” of characteristics:
  - Limited resources
  - Limited primary care providers
  - Substantial rurality
  - (California may be a state joining as the result of snowballing of concept)

- Pharmacists must obtain special certification from state, essential difference between APP and CDTM, which is open to all RPhs
Let me say that again….

- The KEY difference between collaborative practice agreements and Advanced Practice Models is:
  - The requirement for some sort of additional certification, supra-license, or government recognition of the practitioner beyond the basic license.
  - Some political consequences to that issue.
Pharmacy Organization Support

• As I’ve already mentioned, APhA, NARD (I believe) and ACCP have language in their charters such that they can only support legislation or initiatives that apply to ALL pharmacists as long as they are licensed by their state(s).

• ASHP had the same issue, dealt with it by re-writing the charter.

• Others pursuing federal provider status…..
Outside the U.S.- The UK: PSP

- UK passed supplementary prescribers law for pharmacists (chemists) in 2001 (one source reports 03) - see the readings.
- Pharmacists may obtain prescribing privileges after the completion of a training program recognized by the National Health Service (NHS) (so, additional supra-license training) becoming a: PSP- Pharmacist Supplementary Prescriber
- In essence, a PSP may take an existing prescription and alter it in response to lab results and/or patient issues (would work great with, say, my ADDRESS technology).
Outside the U.S.- The UK: PSP

• Legislative expansion allowing independent prescribing rights occurred in 2006, creating two levels of prescribing pharmacist:
  – Supplementary prescribers (modify existing prescription)
  – Independent prescribers (issue NEW prescriptions)
  – However, unlike US counterparts, UK “chemists” aren’t allowed to prescribe controlled substances in their APM model.
Canada

- Prescribe emergency contraception circa 2000
- In Alberta, the approval of the Pharmacists Profession Regulation to the Health Professions Act (May 2006) has resulted in an expanded scope of practice for pharmacists, including:
  - the privilege to prescribe Schedule 1 drugs and blood products and to administer medications for subcutaneous and intramuscular injection. (Sched. 1 means Rx drug)
  - The Pharmacy and Drug Act (October 2006) specifically defines the new standards for pharmacy practice.
Alberta Model

- Two variants of prescribing:
  - 1st, pharmacists decide whether or not to adopt prescribing authority. Then, either:
    - adapting a prescription
    - initiating/managing drug therapy
adapting a prescription

• the type of prescribing that is most widely applicable to pharmacists.

• The Alberta College of Pharmacists requires that pharmacists complete an orientation and a continuing education program.

• Patient assessment and drug therapy decided by physician/prescriber.

• Pharmacist must obtain patient's Informed Consent.
Adapting

- May change original Rx, but not renewals.
- Generic or therapeutic substitutions or changes to the dose or form allowed due to needs of patient.
- Pharmacist is obligated to notify the original prescriber of rationale & becomes the legal prescriber of the adapted prescription, with associated responsibility.
- Pharmacists may provide interim prescription refills
- Pharmacist accepts the responsibility for the refill prescription but must refer for reassessment and evaluation
Adapting Model

- Basically, the M.D. makes diagnosis, initiates therapy.
- An adapting pharmacist then acts according to their professional judgement to optimize that prescription.
- Change in dose, duration, therapeutic substitution.
- Tailoring therapy
initiating/managing drug therapy (IMDT)

• Limited; pharmacists permitted to do so are registered with Alberta College of Pharmacists

• Must demonstrate competencies of education, training, experience, collaborative relationships and practice setting.
Alberta Model (IMDT)

- permitted to assess patients, determine need for drug therapy.
- May work in collaboration with physicians
- Assume responsibility for management of drug therapy
- A patient may be referred to an authorized pharmacist by a physician to select the appropriate drug, dose and dosage form required to treat the condition- (referred to as comprehensive drug therapy management).
More IMDT

- assume responsibility for ongoing therapy (monitoring, adjusting, maintaining or initiating drug therapy) for chronic diseases.
- All prescribing decisions are made under the authority and responsibility of the pharmacist as the legal prescriber.
“SNOWBALLING”

• Saskatchewan College of Pharmacists proposal (2006)
• Manitoba—a 2006 law allows pharmacists to prescribe drugs and to order diagnostic tests; however, the regulations not in place as of 2011
• The British Columbia Pharmacy Association issued statement in 2007, in support of the principle of pharmacist prescribing, but to date the province has not developed any legislation.
International Models

• Nilsen identifies 8 different models of pharmacist prescribing across the world.
• Options range from very limited (contraception) to very broad (Alberta model).
## Table 1: Authority or Responsibilities of Pharmacists Under International Pharmacist Prescribing Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Recognize Symptoms or Diagnosis</th>
<th>Select Therapy</th>
<th>Supply and Administer Therapy</th>
<th>Initiate Therapy</th>
<th>Monitor and Modify Therapy</th>
<th>Start Therapy</th>
<th>Continue Therapy</th>
<th>Discontinue Therapy</th>
<th>Supervise Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent prescribing</td>
<td>Full</td>
<td>Full</td>
<td>No</td>
<td>Full</td>
<td>Full</td>
<td>Full</td>
<td>Full</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Collaborative prescribing</td>
<td>Diagnosis, initial treatment decision by medical practitioner</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Supplementary prescribing</td>
<td>Diagnosis, initial treatment decision by medical practitioner</td>
<td>Per agreed patient-specific management plan</td>
<td>No</td>
<td>Per agreed patient-specific management plan</td>
<td>Per agreed patient-specific management plan</td>
<td>Per agreed patient-specific management plan</td>
<td>Per agreed patient-specific management plan</td>
<td>Per agreed patient-specific management plan</td>
<td>Collaboratively by nominated individual independent prescriber</td>
</tr>
<tr>
<td>Patient referral</td>
<td>Diagnosis, initial treatment decision by medical practitioner</td>
<td>Diagnosis, initial treatment decision by medical practitioner</td>
<td>No</td>
<td>Diagnosis, initial treatment decision by medical practitioner</td>
<td>Management of specific therapy or therapeutic outcome</td>
<td>Management of specific therapy or therapeutic outcome</td>
<td>Management of specific therapy or therapeutic outcome</td>
<td>Management of specific therapy or therapeutic outcome</td>
<td>By nominated individual independent prescriber</td>
</tr>
<tr>
<td>Formulary</td>
<td>Per list of approved treatable symptoms</td>
<td>Per preapproved formulary according to symptoms</td>
<td>No</td>
<td>Indirectly per preapproved formulary</td>
<td>Criteria for referral</td>
<td>Duration as per preapproved formulary</td>
<td>Duration as per preapproved formulary</td>
<td>Duration as per preapproved formulary</td>
<td>Indirectly according to preapproved formulary</td>
</tr>
<tr>
<td>Protocol</td>
<td>Per list of approved treatable symptoms</td>
<td>Preapproved medication according to symptoms</td>
<td>Yes</td>
<td>Per protocol-driven symptoms</td>
<td>According to preapproved protocol</td>
<td>According to preapproved protocol</td>
<td>According to preapproved protocol</td>
<td>According to preapproved protocol</td>
<td>Prescribing delegated by independent prescriber</td>
</tr>
<tr>
<td>Patient group direction</td>
<td>Per list of approved treatable symptoms</td>
<td>Written direction under preapproved protocols</td>
<td>Supply and administration written direction under preapproved protocols</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Delegated under preapproved conditions and protocols</td>
</tr>
<tr>
<td>Repeat prescribing (continuous)</td>
<td>Diagnosis, initial treatment decision by medical practitioner</td>
<td>Diagnosis, initial treatment decision by medical practitioner</td>
<td>Only supply sufficient medication until next appointment</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Delegated under preapproved conditions and protocols</td>
</tr>
<tr>
<td>Administration</td>
<td>Per list of approved treatable symptoms</td>
<td>Per preapproved formulary according to symptoms</td>
<td>Only administer for immediate treatment</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>According to preapproved protocol</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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Key Points of Difference between APM and CDTM

• Requirement for additional training to perform tasks and assume responsibility

• Existence of some form of supra-licensing status, or credentialing- APM pharmacists have additional, formal credentials or license beyond a pharmacist license

• The credential is granted by a governmental or government approved organization or body, not professional organization.

• So- CPP (board) versus BCPS (ACCP)
NM/NC survey – disease states

- Diabetes (57.8%)
- coagulation or lipid disorders (54.7%)
- Hypertension (46.9%)
- Smoking cessation (28.1%)
- Asthma or COPD (23.4%)
- Pain (20.3%)
- Heart failure (17.2%)
Different? APM RPhs report:

- Patient perceptions, 59.4% “great deal” 23.4% “somewhat” of a difference from traditional pharmacists
- Physician perceptions, 70.3% “great deal” 20.3% “somewhat different”
- APM pharmacists saw themselves as different than RPhs in terms of: autonomy (51.6%), direct patient care (21.9%), functional competence and confidence (20.3%), lack of medication dispensing (9.4%), collaborative practice (7.8%)
Satisfaction with services?

- 90.6% said patients were “a great deal” satisfied
- 84.4% said physicians were “a great deal” satisfied with their services.
- 50% said “a great deal” satisfied & 28.1% said “somewhat” satisfied, in terms of administration’s satisfaction.
Benefits?

• (82.8%) indicated their services were saving money for patients
• (92.2%) indicated their services were decreasing costs for the U.S. health care system.
Cost Estimates

• ~50% estimated saving of $1,189 for all patients seen in a month
• Remaining respondents indicated ~ $249 per patient seen
• 68% said savings exceeded salary, 20% said equaled, 11% said less than.
• 10 estimated monthly cost-savings for the U.S. health care system, average estimate of $37,200, or $446,400/yr
• Approximate ROI of 4.05
Value Added

- 69% estimated their services, if provided by a physician, would cost more than APM costs (range, 0–500%)
- 85.9% of respondents felt their services were improving outcomes “a great deal.”
- 54.7% felt there was “a great deal” of demand for APM services; 25% felt APMs were “somewhat” in demand
Proving Value

- 37.5% indicated a need to justify their position
- Methods of justification cited included providing cost-avoidance estimates (70.8%), reporting cash-flow metrics (45.8%), and the use of other metrics (16.7%) such as clinical outcomes and benefits to the organization in the areas of research and administration.
barriers

- issues with acceptance (23.4%)
- reimbursement challenges (18.8%)
- administrative issues (9.4%)
- patient acceptance and awareness (4.7%)
Billing

• (64%) were attempting to generate revenue for their organizations by billing for the services they provided

• Typically by using E&M codes or by billing “incident-to” fees

• Respondents estimated that, on average, they were billing for fees of $6500 per month for their services-less than pay.

• Provider status and revenue generation is an issue
APM characteristics

- Average time of practice before credentials = 11 years, despite NM graduates all graduating with training.
- Suggests TYPE of pharmacist, not age cohort
- Less than 40% had completed post-graduate training, including residencies or fellowships.
- Advanced training not a prerequisite.
A final observation

- In all these areas, adoption by pharmacists is in the single digits.
- Even in the UK, where pharmacist are recognized and paid as providers- they HAVE provider status!
- Alberta may be the most successful to date.
- When your chance comes, you need to lean forward-
- To “Practice at the top of your license”
• Questions?