

THE INDIAN HEALTH SERVICE

# EHR Reminders



## Selection and Deployment

Superior Health Information Management  
Now and for the Future

# Session Objectives

At the end of this session, the participant will be able to:

- Understand ways to approach selection of reminders for deployment.

# Overview (1)

- **Reminders** – tells clinician who needs what and when.
- **Reminder Dialogs** – puts what for whom in the PCC/EHR to resolve the reminder (writes a note at the same time).

# Overview (2)

## 1. Decision to deploy reminders:

- Leadership must provide resources... it's not load and go! It's a tool.

*Leadership buy in with top down support*

## 2. Determine what is needed for whom (Site Eval - use a structured improvement process!):

- What do you need to be reminded to do?
- Review GPRA, CRS, MU measures.
- Review with QI committee how well your patient population and local practice is meeting standards of care to identify area where improvement is needed.

*Use tools (GPRA, CRS, iCare) to illustrate where you are now and where you need to go. This helps to "create will" and motivate users to adopt reminders.*

# Overview (3)

## 3. Determine how to resolve the reminders (through tabs or dialogs):

*Engage users*

## 4. Determine who will resolve which reminders (delegation):

- Review local policies and procedures.
- Delegation of duties must be supported by policies, procedures, and scopes of practice.

*Engage facility and discipline leadership, make sure representation from the disciplines delegating from and delegating to are represented.*

# Tools - Clinical Reminders

- Take care of the people who are coming through your doors:
  - Identifies who needs what at the time/point of service.
  - Provides tools to document note and enter data in RPMS at the time and point of service.
  - Empowers users.

# Tools - iCare

- Change monitoring:
  - Evaluate (baseline)metrics.
  - Re-evaluate metrics.
- Take care of people who are not coming through your doors:
  - Case management to locate patients who need services.
  - Recall patients who need services.

# Determine What you need for Whom (1)

\*\*\*Recommend doing this in a QI or similar process improvement forum\*\*\*

- Review GPRA and CRS.
  - Remember GPRA is just a snapshot and not necessarily standard of care but very important for measuring trends.
  - Measure, Measure, Measure!
- Review Standards of Care/Guidelines to determine your problem areas.
- List your site's "wish list" for reminders.



# Determine What you need for Whom (2)

\*\*\*Recommend doing this in a QI or similar process improvement forum\*\*\*

- Review the National Reminders:
  - Determine which ones meet your needs “as is.”
  - Determine which ones you will need to tighten criteria.

# Determine What you need for Whom (3)

\*\*\*Recommend doing this in a QI or similar process improvement forum\*\*\*

- Identify Reminders you need to consider creating:
  - You ***must*** have clearly defined criteria. Should be based on an established standard of care/guideline.
  - Should ***never*** be less restrictive than established standard of care.

# Determine how to Resolve the Reminder

- Use the tabs and enter in EHR?
- Use dialogs – determine criteria for resolution:
  - What goes into PCC/EHR.
  - What else you want to document (additional findings, note text):
    - Are the National Reminder Dialogs sufficient for your needs?
    - If not, what do you want added, removed?
    - If you want new ones, what has already been done by others?

*EHR Reminders Listserv is a great way to exchange ideas*

# Determine Who will Resolve Reminder (1)

- What will you delegate?
  - Make sure there are policies and procedures to support your reminders.
  - Make sure the delegation is appropriate:
    - Review state scopes of practice:
      - There are great variations on what is allowed from state to state.

# Determine Who will Resolve Reminder (2)

- Reminders that require clinical judgment may only be appropriate for RN, Pharmacy or Provider staff:
  - Depo-Provera
  - Childhood vaccines (state specific)
  - Medications
  - Procedure referrals (colonoscopy, type of breast imaging may change based on physical exam)

# Determine Who will Resolve Reminder (3)

- Patient specific standing order vs non-patient specific standing order:
  - Most reminders are non-patient specific in that the logic is applied to determine who is due for what based on a general guideline or policy.
  - “Diabetics who have not had a HGBA1C in 6 months” – there is likely not an order for a HGBA1C for that patient written by a provider in that patient’s chart. The order is based on a clinic policy, non-patient specific standing order, or hospital protocol.

# Determine Who will Resolve Reminder (4)

- Prioritize and functionally group your ***Wish List***:
  - This will drive your staged deployment.

# Develop Local Reminders (1)

- Develop requirements:
  - Based on recognized Clinical Guidelines or Standards of Care.
  - Based on well defined local problems (and as stringent or more than prudent standard of care).
    - Example: Glaucoma or increased IOP follow up.



# Develop Local Reminders (2)

- Define the reminder:
  - Write the reminder definition in a narrative form that clearly describes what you want the reminder to do.
  - Use the reminder narrative to identify patient data you need and how to capture it.
- Make a list:
  - Write down **Who should** (and *should not*) get **What** and **When** (findings and patient cohort logic).
- **Who** and **Who Not** (cohort):
  - Age
  - Sex
  - Findings that put patient in cohort (diagnoses, med classes, orderable items, etc.)
  - Findings that exclude patients (diagnoses, procedures, etc.)

# Develop Local Reminders (3)

- **What** satisfies the reminder (resolution):
  - Findings (lab, measurement, CPT or ICD9 code, medication, health factor, exam, etc.)
  - Resolution logic (one finding, multiple findings).
- **When** (frequency).
- **What** supporting information (guidance for user):
  - Findings that are not patient cohort and not resolution logic (a refusal that you can see in clinical maintenance but doesn't turn off reminder).
  - Text to reveal in clinical maintenance.
  - Web links you may wish to add for references.

# Develop Local Reminders (4)

Write down the logic in sentence form then translate to Boolean logic. We'll use an existing reminder as an example:

I want women (sex) age 21 to 65 (age) who have an intact cervix (no evidence of hysterectomy that removes cervix) to have a PAP (lab result, WH package result, CPT code for pap) every 3 years (frequency)

- **COHORT:** Women, age 21-65 and not hysterectomy (taxonomy of ICD0 procedure and CPT codes for hysterectomy)
- **FREQUENCY:** q3years
- **RESOLUTION:** Lab test (pap, thin prep), CPT code for PAP or PAP acquisition (taxonomy of CPT codes), Result in WH package (computed finding)

# Develop Local Reminders (5)

It looks like this:

Cohort: Age (21-65) AND Sex (Female) AND NOT  
Hysterectomy (Tax)  
(SEX)&(AGE)&'FI(IHS-HYSTERECTOMY)

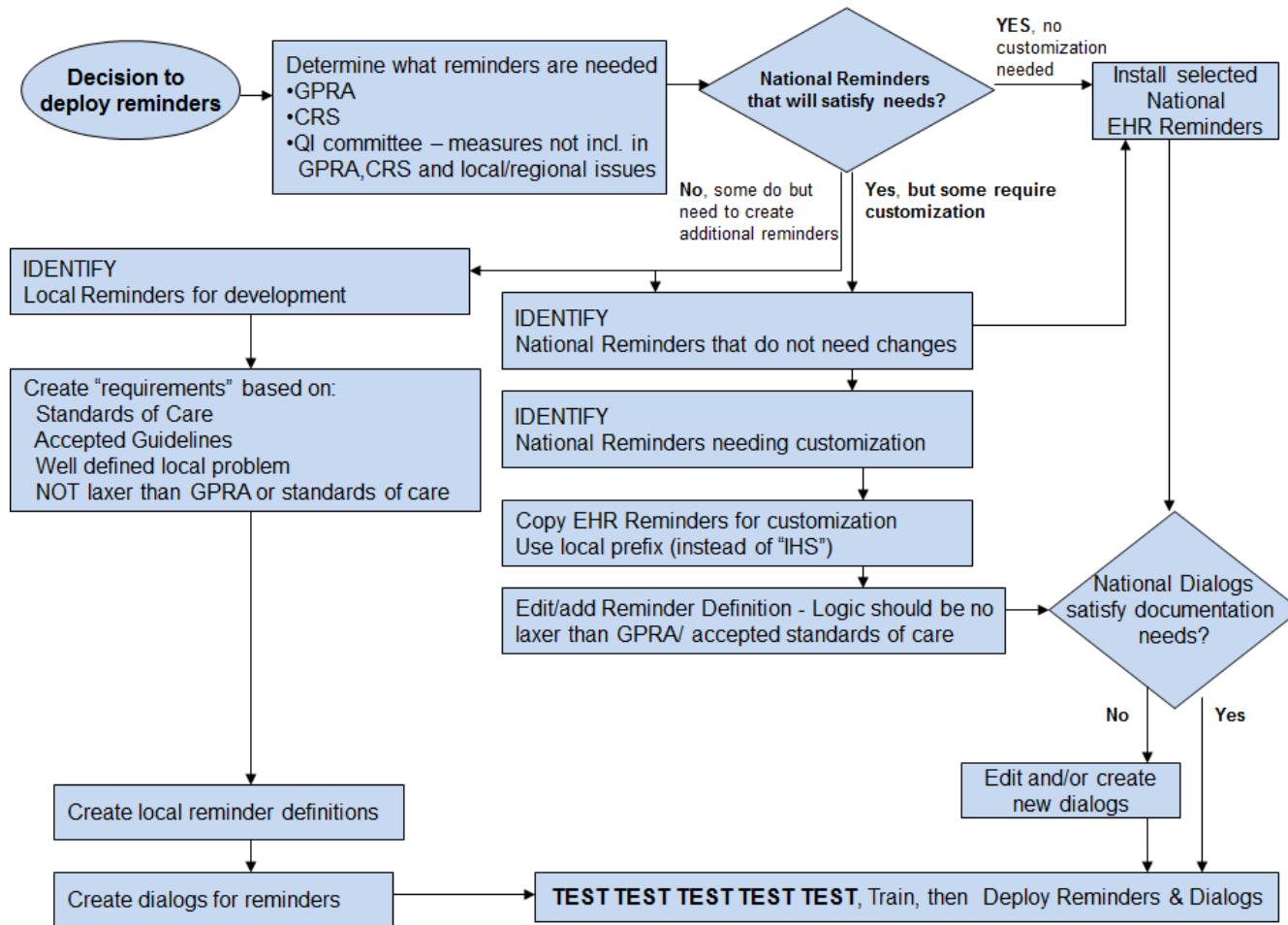
Frequency: 3 years

Resolution: Lab test OR CPT code (Tax) OR WH result  
(computed finding)  
FI(IHS-PAP SMEAR)!FI(IHS-PAP)!FI(IHS-PAP  
SMEAR)

# Develop Local Dialogs

- Who will be using the dialog?
  - Nurses? Providers? Other clinical staff?
  - Will it be linked to a reminder?
  - Used as a Reminder Dialog Template and/or linked to a note title?
- What satisfies the reminder and what makes it not applicable: diagnoses, lab results, x-rays, education?
  - Enter encounter data for today's visit?
  - Enter labs or consult orders?
  - Enter historical exams, imms, procedures?

# EHR Reminder Selection and Development



# Deployment of Reminders – Lessons Learned (1)

- Test Test Test Test Test
- **All** reminders, whether nationally released or not, must be tested:
  - Many reminders have terms that require mapping.
  - You will reveal coding and documentation errors and you must identify a process for resolving these.

# Deployment of Reminders – Lessons Learned (2)

- Test Test Test Test Test
- Verify the following:
  - Reminder identifies the **Cohort** properly:
    - The reminder is **Applicable** for the right patients (Blue and Red clock).
    - The reminder is **Not Applicable** for the right patients (White clock)

*This is extremely important and the CAC must test for this. Users will not necessarily notice if a patient is not in the cohort and should be. The user is focused on the Applicable/Due reminders (Red clock).*
  - Reminder is **Due** when it should be (Blue Clock).



# Deployment of Reminders – Lessons Learned (3)

- Test Test Test Test Test
- Verify the following (cont.):
  - Reminder is **Resolved** when it should be (Blue clock)

*This is extremely important and the CAC must specifically test for this. Users will not necessarily notice if a patient is “not due” incorrectly. The user is focused on the Applicable/Due reminders (Red clock)*

# Deployment of Reminder Dialogs – Lessons Learned

- Test Test Test Test Test
- Verify the following:
  - Your dialogs write the correct information to EHR components, Health Summary, and PCC (check the visit file).
  - Your note text is correct.
  - ***Do not depend*** on either your Dialog Text or Note Text to verify that information is being written to RPMS or retrieved from RPMS correctly – physically look at the visit file data and the EHR components!

# Deployment of Reminders – Lessons Learned (4)

- Plan your first, second, third waves and more of deployment (PDSA!)
  - Deploying a zillion reminders at once will overwhelm users.
  - Consider deploying a practical suite of reminders then roll out in stages (PDSA!)
  - Make sure you have policies to back up the reminders!
    - A lesson learned from Warm Springs – Reminders were used to delegate specific tasks to RN and NA staff. Yakama used a similar technique:

An example of staged deployment:

## **1<sup>st</sup> wave: Nursing**

- Alcohol
- Domestic Violence
- Depression
- Tobacco
- Colon Ca
- DM HGBA1C
- DM Microalbumin
- Lipid

## **2nd wave: Nursing**

- Flu & Pneumovax
- DM Foot
- Pap (incl historical)
- Mamm (incl historical)
- Local reminders (pain)
- Immunizations

## **3rd wave: Providers**

- DM Aspirin
- DM ACE/ARB
- Local
  - Glaucoma
  - Pain
  - TZD

# Deploy Reminders - Myth Busters (1)

**Myth #1:** Provider will have *more* to do at a visit.

**Reality #1:** Visits will be more efficient and providers will have better information at visits if reminders are deployed correctly.

## **How do I make sure this happens?**

1. Maximize the use of your Pharmacy, RN, LPN, MA and NA staff.
2. Use reminders to delegate work appropriately.
3. Support the reminders with policies (outpatient) and protocols (inpatient).
4. Review documentation guidelines for billing, state scopes of practice and align accordingly.

# Deploy Reminders - Myth Busters (2)

**Myth #2:** “I like the way I do things now. I don’t want to write a note anyway and it will take longer to use reminder dialogs.”

**Reality #2:** Reminder dialogs are efficient – the user effectively documents on multiple tabs AND writes a note at the same time. Additionally, the user doesn’t have to use a “cheat sheet” or rely on memory to determine what is due or not due. Users often greatly underestimate how long it takes to evaluate the information in the chart and determine what is due.

## **Consider the following demonstration:**

1. Set up two demo patients with the identical reminders due.
2. Demonstrate how (or ask staff) to determine what is due **and** document through the EHR tabs.
3. Demonstrate how (or ask staff) to determine what is due **and** document through Reminder Dialogs.
4. The Reminder Dialog demo is often enough to sway even the most change resistant user.

# Deploy Reminders - Myth Busters (3)

**Myth #3:** Reminders are just too complicated to configure and I don't have the time to configure them.

**Reality #3:** Once you understand cohort, findings, and Boolean logic, reminders are not that complicated. There are tons of recorded WebEx presentations out there that you can use to help you deploy reminders.

## **How can you deploy reminders?**

1. View all the recorded WebEx presentations dealing with reminders.
2. Enlist the help of the Area CAC representative to help deploy.
3. Reminders can be shared. Import reminders from other sites.
4. Use the improvement process to target deployment problem areas and avoid overwhelming both the users and the CACs.
5. Monitor progress – let your staff see the progress!

# Deploy Reminders - Myth Busters (4)

**Myth #4:** Cool beans... now I have reminders, I don't ever have to THINK ever again!

**Reality #4:** Sorry; still need a brain. Reminders review the chart for us and dialogs help us get data entered/ordered. We still need to synthesize the information presented *and* seek any and all additional info we need to care for our patients!

## **Reminders are really cool tools.**

- But reminders are only as good as the programming behind them *and* there is *not* a reminder for every possible clinical scenario!
- Your users will begin to rely heavily on Reminders.
- Test reminders carefully, teach your staff to be good detectives, and temper enthusiasm with a little dose of reality!

# Final Note...

## Train your users to be good detectives:

*If it looks weird, something's probably off*

- Provider/Nurse: “Something isn’t quite right with this picture.”
  - A bunch of young, healthy kids had DM reminders on:
    - Reminders revealed a batch of transcribed coding errors where OM was mistaken for DM.
  - Patient is on a bunch of DM meds, but the DM reminders aren’t on:
    - The Cohort looks back two years. The patient had not been seen in the clinic for DM for over two years and got their meds on the outside.
- Provider: “Cool they don’t need to be checked for Colon Ca – the reminder isn’t on.”
  - Patient has history of colon cancer with intact colon. Still requires follow up colonoscopy.
  - You need to know the content of the reminders **and** still review the patient history for pertinent testing.



# Resources

Refer to these document for more detail:

<ftp://ftp.ihs.gov/pubs/EHR/Reminders/>

MU2 Releases:

[ftp://ftp.ihs.gov/RPMS/patches/MU2\\_RELEASEDOCS.ZIP](ftp://ftp.ihs.gov/RPMS/patches/MU2_RELEASEDOCS.ZIP)

pxrm0200.1002o.pdf (patch/deployment guide)

pxrm020u.pdf (managers manuals)

VA Clinical Reminders:

[http://www.ihs.gov/RPMS/index.cfm?module=Applications&option=View&AC\\_ID=0](http://www.ihs.gov/RPMS/index.cfm?module=Applications&option=View&AC_ID=0)

pxrm0200.1003o.pdf (patch/deployment guide)



# Questions & Discussion