



# **Using EHR Information to Support Workflows for Medical Homes: Get the right tool for the job**

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# Objectives

- Introduction: Which comes first, accurate reporting, or getting the workflow right?
- Workflows necessary for medical homes and the reporting functionality to support them
  - Attribution
  - Care Management
  - Test and Referral Tracking
  - Population Management
  - Performance Reporting



# Why is this so important

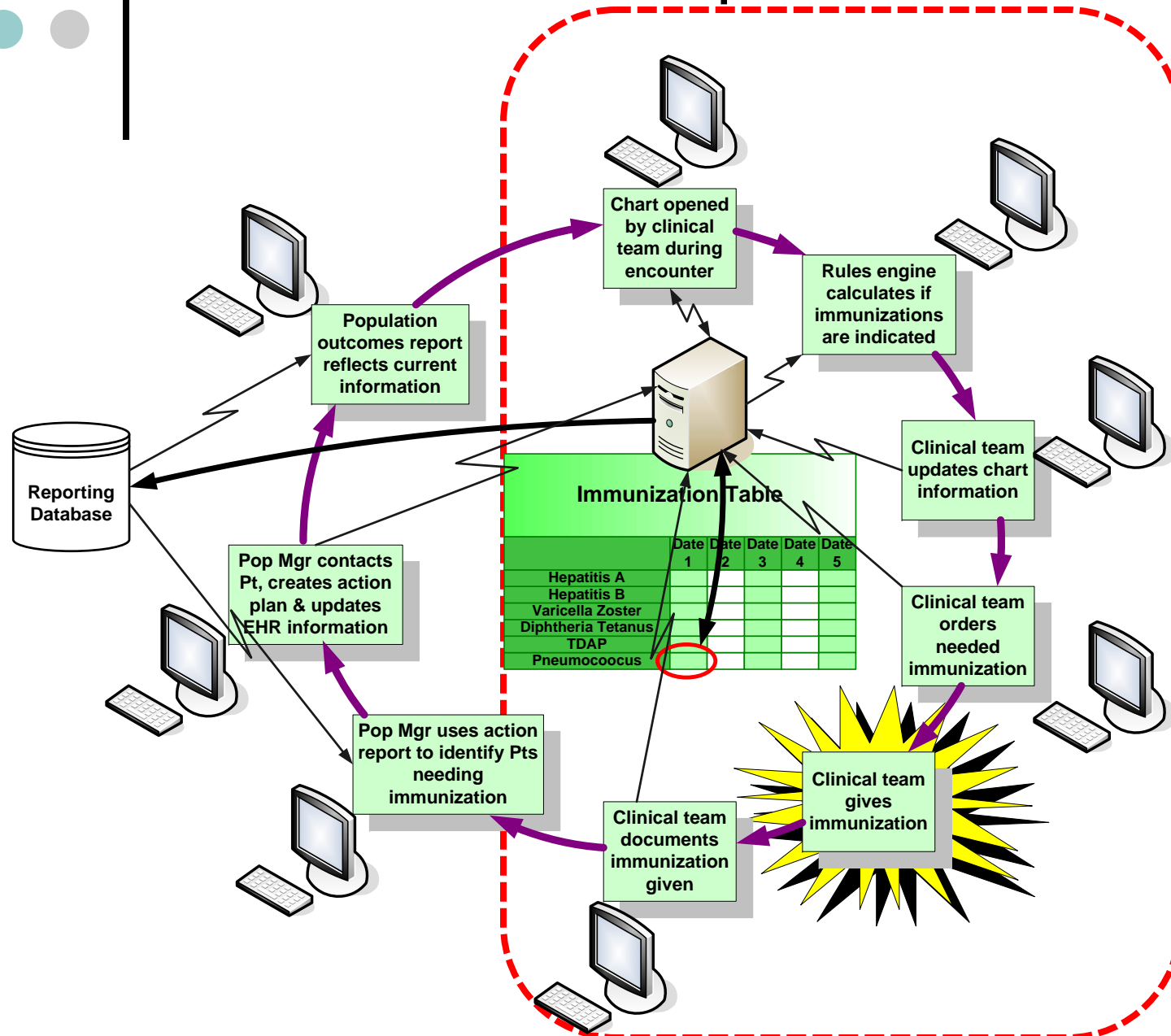
- PCMH effort is the only strategy out there for saving primary care
- Every system is perfectly designed to give you exactly the outcome you get
- Our system is broken: we are getting mediocre outcomes despite best effort
- We can't improve what we're doing without:
  - Better organized information
  - Measuring what we're doing



# Which comes first?

- Outcomes measures and workflow are interdependent and inseparable
- Workflows depend on information
  - Reports, dashboards & rules engines are all ways to organize information effectively
- Outcomes reporting is completely dependent on workflow:
  - To deliver the care being measured
  - To generate useable data for reporting, through standardized data entry

# Information is inseparable from workflow





# The report as change catalyst

- Reports expose unstable workflows & performance variation
- Start with mapping current workflow and creating a future state to:
  - Standardize workflow & reduce waste
  - Standardize how data are captured
- Only by problem-solving reporting issues can the workflow be fixed
- Only by problem-solving unstable workflows can the reporting problems be fixed



# 4 levels of reporting tools

- Excel spreadsheet:
  - Not scalable
- Internal EHR features:
  - Often not very robust
  - Usually require programming
- Business Intelligence Query Engines:
  - Complex reporting tools for DB analysts; costly
  - May be hard wired to a specific EHR
  - Result is “canned reports”
- Custom QI “aftermarket” products:
  - Agile dashboards designed for QI end-user
  - Often a service agreement



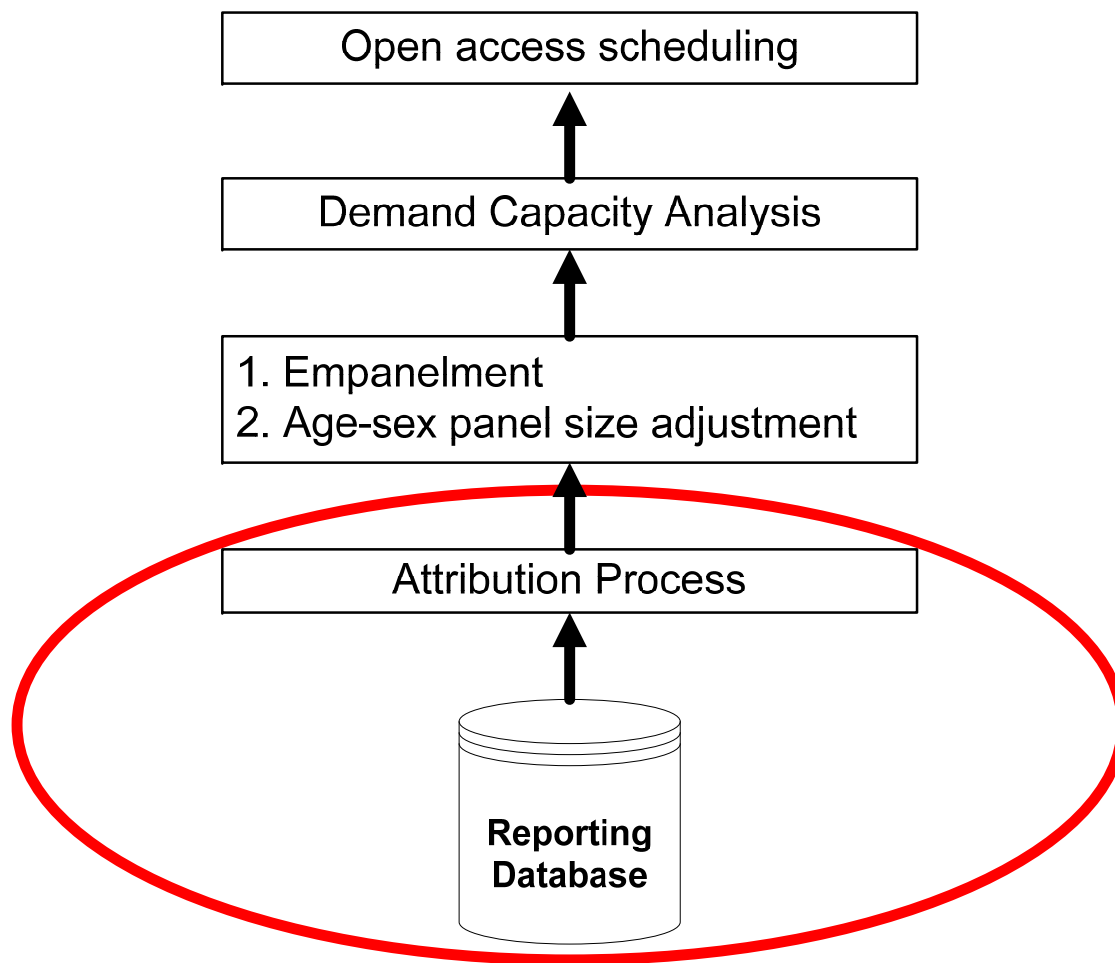
# The Key Workflows for PCMH

- Attribution: who is the PCP?
- Care Management: Dashboards
  - Prevention
  - Chronic illness care
- Referral and Test Tracking:
  - Overdue results
  - Abnormal results
- Population Management:
  - Generating action reports: Pts needing services
- Measuring performance: across practices





# Attribution: Foundation for Empanelment

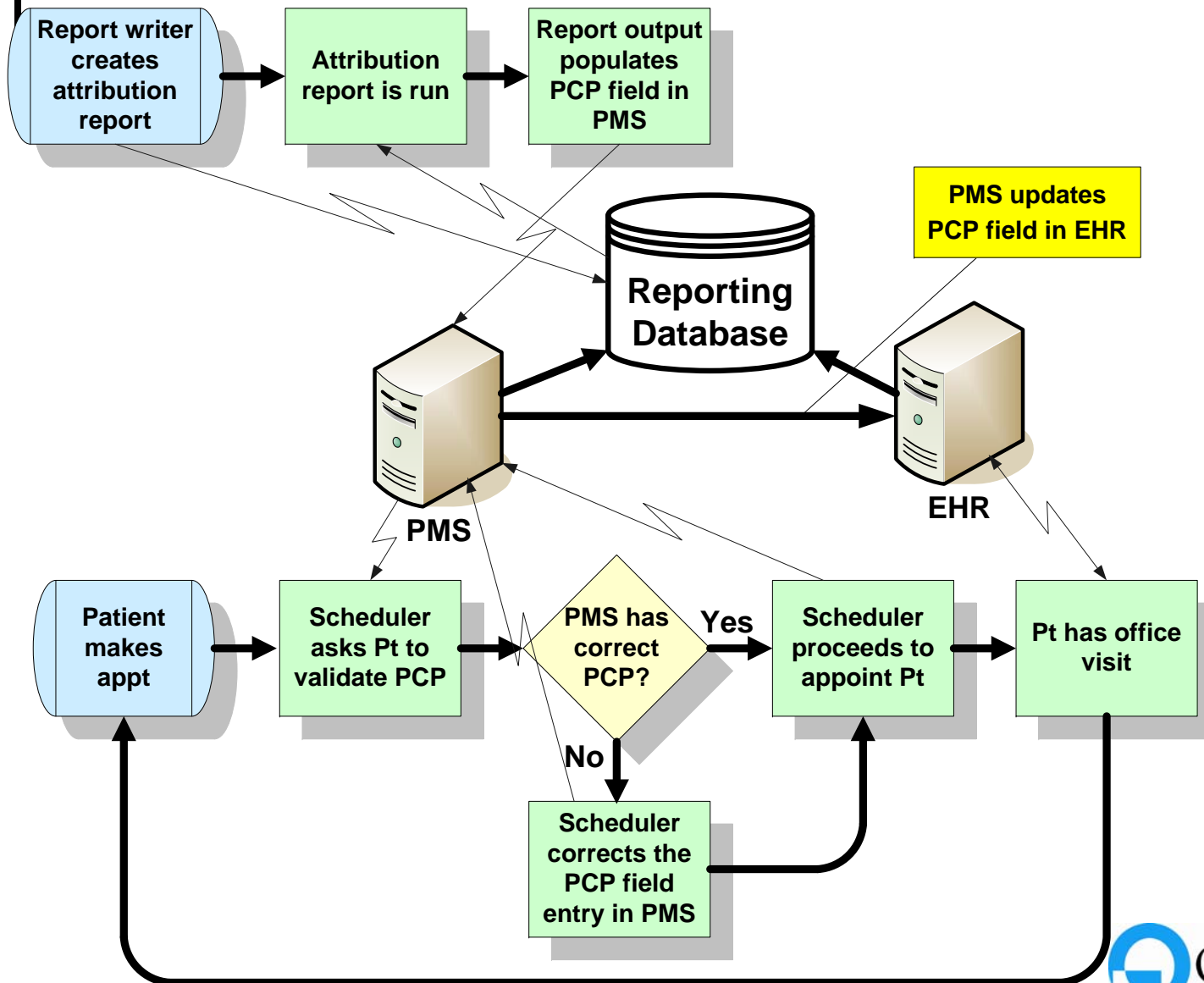




# Attribution: Defining the goals

- Data definition: designate the PCP field
- Create a report for initial attribution:
  - Define criteria for attribution, e.g.
    - Provider seen most often
    - Provider seen most recently
- Define mechanism for entering the decision into the PMS/EHR
- Define a workflow for Pt to validate & update attribution with each visit

# Workflow for Attribution





# What IT Tools Did We Use?

- Report from Reporting Data Base (or PMS)
  - For each active Pt
  - For each office visit in past x months
    - OV Date
    - Encounter Provider
  - Apply agreed upon rules
- Programming to auto load output into designated field
- Maintenance: Workflow only

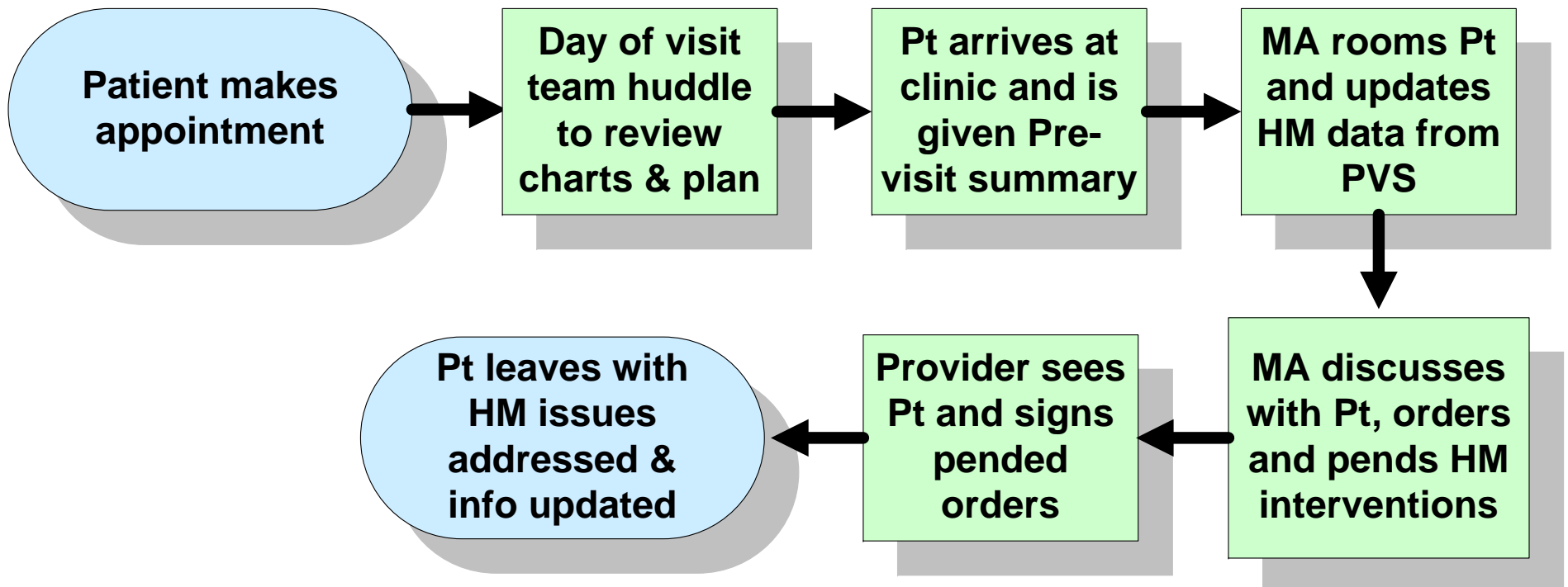


# Care Management: Goals

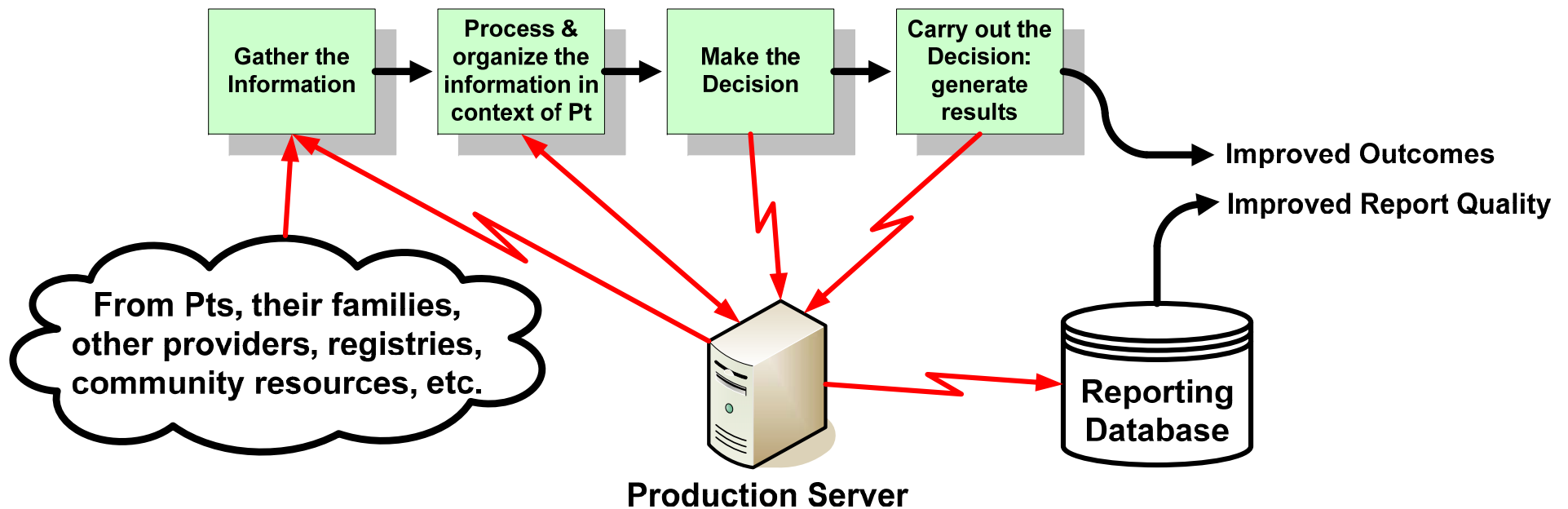
- No one leaves the clinic without it being addressed
  - The power of physician recommendation
  - If we can't deal reliably with patients who are already in the clinic, it makes little sense to ask people to come in for preventive care
- Strategy: standardized workflows, integrated with information, that involve the entire team, to guarantee results



# The Care Mgmt Workflow



# The clinical decision-making information assembly line





# Care Mgmt: Chronic Illness

- Identical workflow strategy for gathering the information during a visit:
- Plan for today's patients in the Huddle
- Pre-visit summary to help activate Pt
- Gather and organize as much info as possible before provider enters room





# What IT Tools Did We Use?

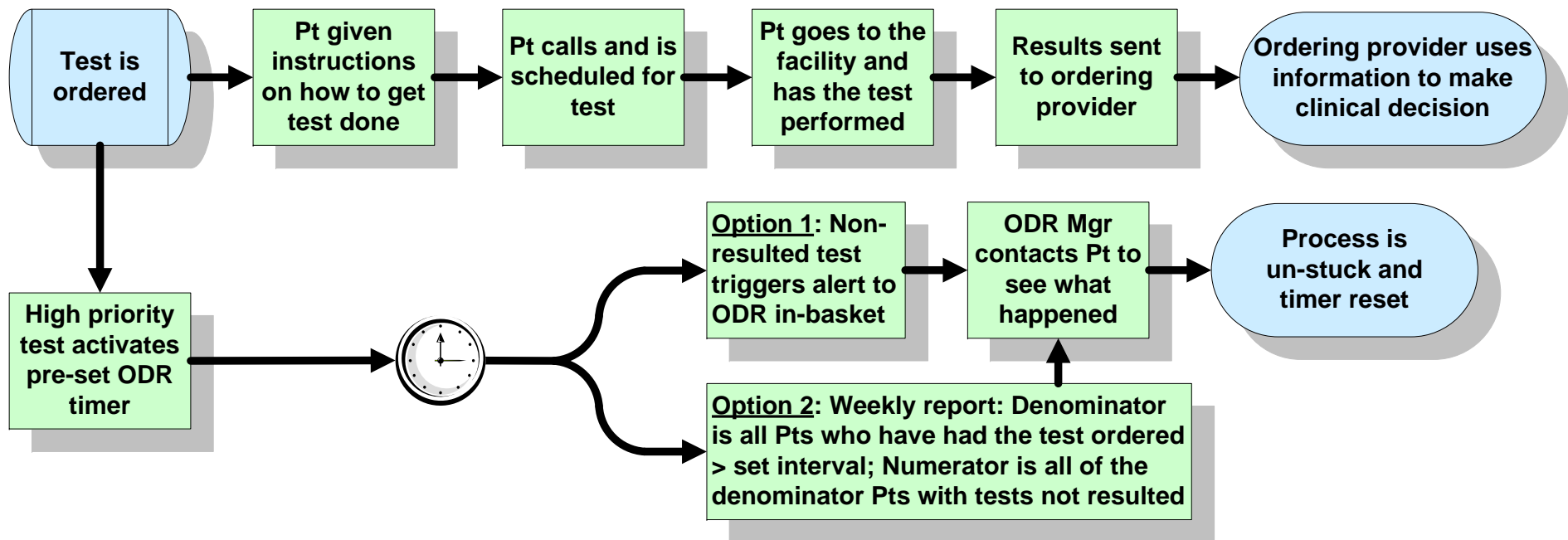
- Prevention and Chronic Illness Care
  - Rules Engines
  - Dashboards
  - Flow Sheets
- Workflow designed to gather and organize the information so the correct clinical decision was obvious



# Test and Referral Tracking

- Workflow goal: Have a process to detect when Pts are lost to follow-up
- What is the workflow?
  - Whose job is it to track down overdue results?
  - How do they do it, and when?
- What tools support the workflow
  - Overdue results rules engine
  - Report showing name & date of orders that need attention

# Overdue results workflow



# ● ● ● | Don't over-do over-due results

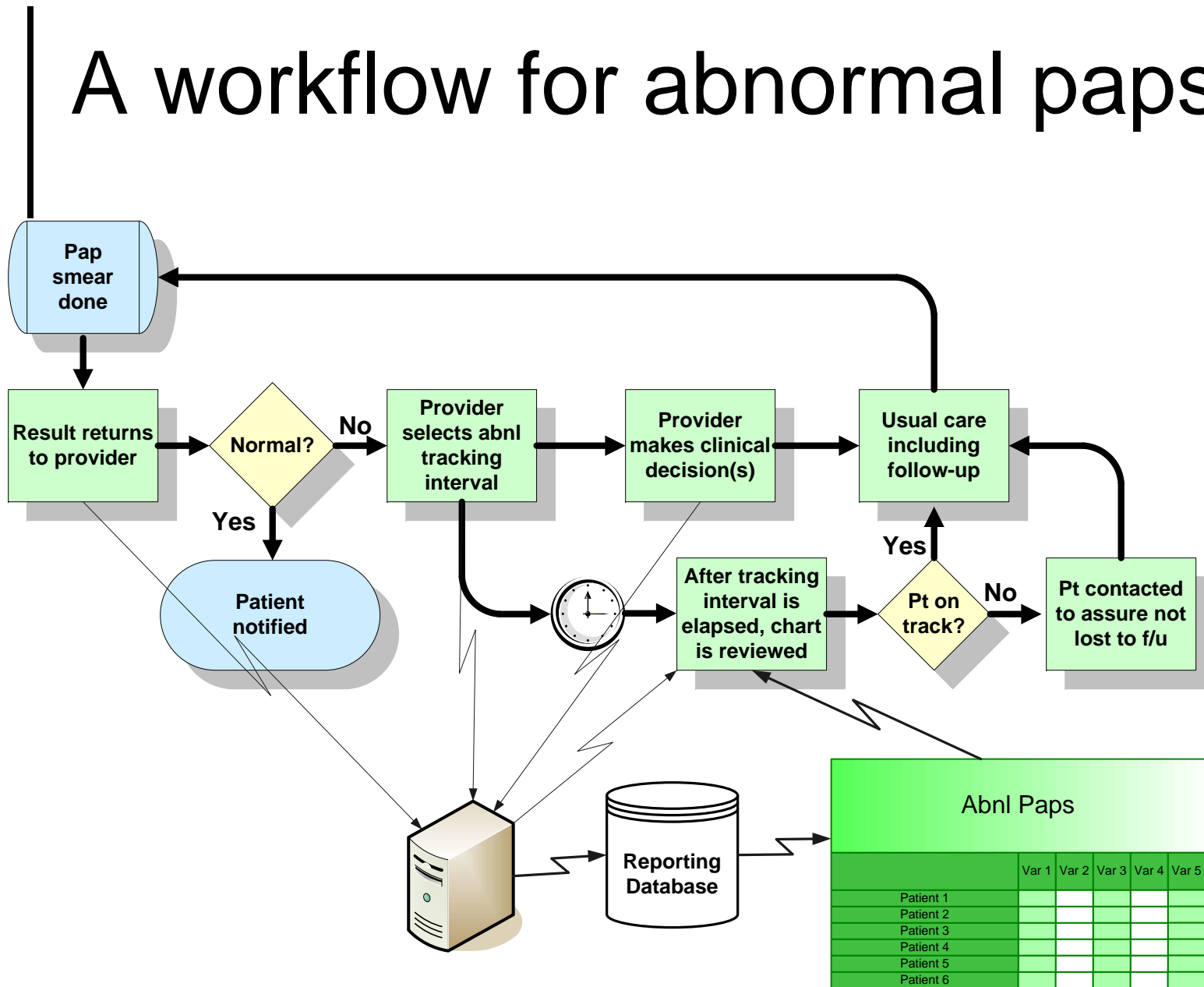
- Don't overload the workflow
  - Pick only high priority tests to track
- Don't over-build it:
  - Automate the tedious tasks
  - Leave clinical decision-making to humans
  - Keep the action burden low
    - Set up standardized responses to ODRs
    - Use automated messaging where it makes sense



# Abnormal results

- Workflow goal: Abnormal results won't slip through the cracks
- What is the workflow?
  - Who does it?
  - When?
  - What tools do they need to do it?
- Example: All women with abnormal paps

# A workflow for abnormal paps





# What does the report need?

- Patient name, ID
- Date of last pap
- The f/u interval
- Some way to resolve or turn it off when Pt no longer needs tracking
  - Reset f/u interval to a new value
  - Delete f/u interval



# Population Management

- What is the workflow?
  - Goals:
    - Automate monitoring
    - Early recognition of complications
    - Assure systematic interventions
    - Risk factor reduction
    - Empowering patients
      - Self-management support
      - Patient education
  - Whose job is it?

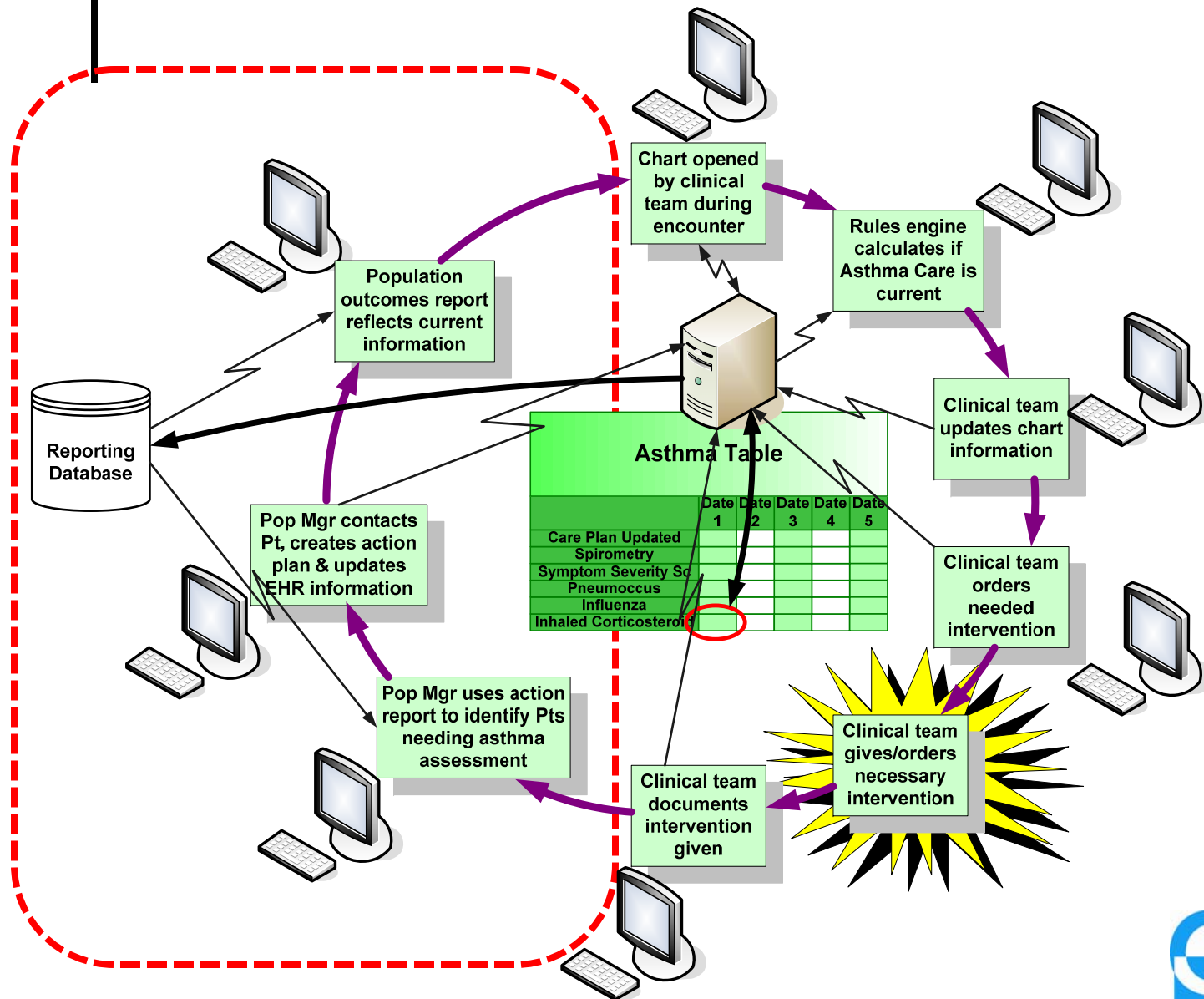




# Workflow steps

- Chronic Disease Manager runs & reviews action report
- Chronic Disease Manager contacts Pt
  - Orders tests
  - Adjusts treatment
  - Assesses patient self-management needs
- Coordinates with PCP for
  - Information flow
  - Clinic visits
  - Group visits

# Information flow in Population Mmgt





# Anatomy of an action report

- Denominators
  - Careful definition of the population
  - Accurate attribution is essential
- Numerators: All the patients needing action
  - Orders & results
  - Custom data entry fields
- All the Population Manager needs to see is the patients in the numerator



# Outcomes Reports

- Same principle as action reports except the numerator is reversed
  - Denominator: entire population
  - Numerator: Those meeting criteria
- Must be able to drill down to clinic & provider but not to patient level
  - Attribution must be reliable
- Trending to monitor progress
  - External and external for incentives
  - All you may need is percents



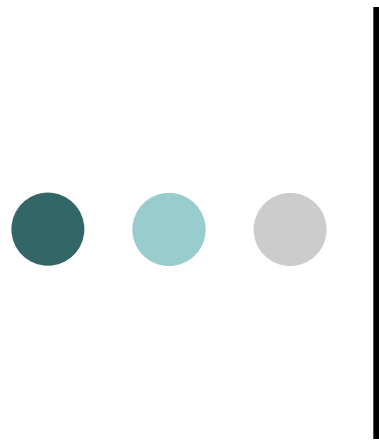
# Getting Started

- Identify a topic where success is likely
  - A clear plan
  - Widely shared motivation for change
  - Organizational capability
- Redesigning the workflow (another whole topic for discussion)
- Creating and maintaining the report
  - Whose job is it?
  - Do they have the right tools?
  - Do they have the right skills?



## Conclusion:

- Reports/Dashboards & workflow are inseparable, so build them together
- Medical Homes requires new workflows and new information management
  - Empanelment
  - Care management
  - Results tracking
  - Population management
  - Outcomes reporting
- Get the right tool for the job



Questions?