Increase your practice’s efficiency – without blowing your budget

HIPAA-compliant, inexpensive tech hacks to improve data workflows

Suzanne Berman, MD, FAAP
PCC UC 2017
Data-heavy workflows often cause grief

<table>
<thead>
<tr>
<th>Internal/staff-facing</th>
<th>External/patient-facing</th>
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<tbody>
<tr>
<td>Prior authorizations for medications, labs, and studies</td>
<td>Chasing patients to get lab orders completed</td>
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<tr>
<td>Formulary tracking</td>
<td>Collections</td>
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<tr>
<td>Responses to claim rejections</td>
<td>Getting accurate demographic data (especially phone numbers)</td>
</tr>
<tr>
<td>Running practice metrics manually</td>
<td>Completing forms for patients (FMLA, sports physicals, asthma action plan)</td>
</tr>
<tr>
<td>Auditing charts for QI projects</td>
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<tr>
<td>Reviewing quality reports for accuracy</td>
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<tr>
<td>Responding to record requests / Getting records from other practices</td>
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</tbody>
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Speed and accuracy of workflows affected by:

• Proper knowledge, training, and experience
• Proper tools and materials
• Proper/reliable inputs
• “Series only” vs. parallelability
• Batchability
• Scalability
• Lack of interruptions
• Supervisor support
Steps in evaluating your workflows

• Get input from key users of the workflow as well as key users of the workflow’s output
• Diagram the workflow
• Study the workflow in action:

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Bottlenecks</th>
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<tbody>
<tr>
<td>Variability</td>
<td>Delays</td>
</tr>
<tr>
<td>Decision points</td>
<td>Resources</td>
</tr>
<tr>
<td>Interruptions</td>
<td></td>
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</tbody>
</table>
Human judgment?
Human labor/time?
Non-staff costs?
Human judgment?
Human labor/time?
Non-staff costs?
Steps in improving workflows

In the workflow you’re dissatisfied with, what can be:

- **Automated**: What are you doing by hand that a computer can do faster and better?
- **Batched**: Must each request be handled at the time it comes in, or is batching permissible?
- **Choice reduction**: Do I really need a decision step here when 98.5% of the time, the answer is the same?
- **Delegated**: Can a direct, or someone outside the practice, take this over?
- **Eliminated**: What does each step add? Are any steps completely unnecessary?
Why don’t we improve more workflows?

Are you too busy to improve?

No thanks!
We are too busy
Why don’t we improve more workflows?

- Failure to invest time in workflow evaluation
- Lack of understanding on essential components of workflow
- Minimizing/underestimating time and resources required in workflow
- Overestimating time and resources required to improve
- Unwillingness to change or delegate
- Unaware that tool exists, or that it can be applied to a certain problem
- Afraid of losing human touch
Why digitize workflows?

- Free up employee time (searching, reformatting, copying, sorting, documenting)
- Improve accuracy and compliance
- More time for patient care/customer service
- Free up physical space
- Job satisfaction
- Improve overall efficiency of your practice
Make sure your ROI analysis is fair

<table>
<thead>
<tr>
<th>Excel script for automatically reconciling list</th>
<th>Reconciling patient list by hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Excel: 20 hours of manager time (@$35/hr):</td>
<td></td>
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<tr>
<td></td>
<td>$700</td>
</tr>
<tr>
<td>Writing and testing Excel script: 5 hours of manager time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$175</td>
</tr>
<tr>
<td>“Total cost: $875”</td>
<td>“Status quo: free”</td>
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</tbody>
</table>
Make sure your ROI analysis is fair

<table>
<thead>
<tr>
<th>Excel script for automatically reconciling list, once per month</th>
<th>Reconciling patient list by hand, once per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Excel: 20 hours of manager time (@$35/hr): $700</td>
<td>List matching (12 hours, secretary time, @$15/hr): $180</td>
</tr>
<tr>
<td>Writing and testing Excel script: 5 hours of manager time: $175</td>
<td></td>
</tr>
<tr>
<td>List matching (5 min, secretary time, @$15/hr): $1.25</td>
<td></td>
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In this model, automation actually starts saving money by month 5
Just because you have it doesn’t mean you should use it

“If all you have is a hammer, everything looks like a nail.”


• Choose a tool that does the job YOU need done
• Don’t use tools that are unwieldy for the problem you need to have solved
Some workflows are better digitized than others

<table>
<thead>
<tr>
<th>Better to automate</th>
<th>More difficult/undesirable to automate</th>
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</thead>
<tbody>
<tr>
<td>Repetitive tasks</td>
<td>New tasks</td>
</tr>
<tr>
<td>Frequent tasks</td>
<td>Tasks with widely varying/individualized results</td>
</tr>
<tr>
<td>Tasks where results have a digital output (documents, spreadsheets)</td>
<td></td>
</tr>
<tr>
<td>Boring tasks</td>
<td></td>
</tr>
<tr>
<td>Time-sensitive tasks</td>
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Recommended tools for automation: the requirements

- Modest computer proficiency required
- HIPAA-compliant
- PMS/EMR agnostic
- Cost must be substantially less than value
General time savers: tools everyone in your office can use

Reducing distractions in:
- Email: Email snoozer
- Web browsing: with read-it-later apps

Reduce time spent searching for:
- How to do [task/procedure X] – with photos & videocapture
- Where we keep [resource Y] – with synced visual bookmarks
- Login credentials for [website Z] – with password managers
- Projects we’re working on – with project management software
Email snoozers and filters

- Emails in your inbox that you can’t deal with definitively are distracting
- Keeping your email organized is a time-saver

**Email snoozers allow you to:**
- Make an email disappear out of your inbox for a predefined period – 1 hour, 1 day, 1 week, 1 month
- Hide CC’s to yourself to give the recipient the chance to read and respond
- See all snoozed emails if you want to check something

**Email filters allow you to:**
- Automatically forward or file messages meeting certain criteria

*Email snoozers include: Snooze and Boomerang*
Most email clients have prebuilt mail filters (including Outlook and Gmail)
In the midst of researching a project, you come across an interesting reference. It’s too above your head now, but after you do more reading, you want to come back to it.

**Read it now?** Risks: rabbit trail, wasted time.

**Browser bookmark?** Risks: bookmark graveyard.

**Text clipfile?** Risk: lack of descriptors; multiple different clipfiles to keep up with.

**Read-it-later apps?** From your phone or desktop, send it to your read-it-later file with a click. Read your stored articles on any device when there’s time.

- **R-I-L apps include** Pocket, EverNote, SpringPad, and Instapaper
Screenshots, digital photos, videos, & videoshots

- Often used for supporting documentation of IT/EMR problems & NCQA submissions
- Probably underutilized for employee training/cross-training:
  - How to login and download/update a patient’s immunization record on the state registry
  - How to do a mail merge of address labels
  - The right way and the wrong way to fill out an employee time-off request
  - The fields that require special tweaks in a Medicare part B claim
  - How to download and set up a 2017 Medicare fee schedule
Synced visual bookmarks

• “The URL for the login to the state immunization registry has changed. All 23 of you, be sure you update your bookmarks.”
• “Cleveland Clinic had a great patient handout for Ehlers-Danlos. I’d like this patient to have it. It’s on the Internet. Somewhere. Go find it.”
• “Where on the Internet can my patient order [those chewable fish oil supplements that taste really good] at the best price?”
• “A map to Dr. Specialist’s office? Yeah, I think I have a copy of a copy somewhere…”
• “My partner Dr. Awesome found that website that estimates the annual cost of asthma medications. I want to look at it now. Today’s her day off, so I will bug her at home.”
Synced visual bookmarks: rapid multimedia deployment at the point of care
Password headaches

Staff members often:
- Reuse the same (weak) password for multiple sites
- Leave passwords lying around
- Don’t change passwords frequently enough
- Don’t keep track of their current passwords

Results:
- Frequent password resets required -> lost time
- Employees locked out of key sites -> lost productivity
- Employee sharing usernames and passwords -> more lockouts and resets
- Lack of security/HIPAA compliance

<table>
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<tr>
<th>Site</th>
<th>Password</th>
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<tbody>
<tr>
<td>BlueCross BlueShield</td>
<td>Cat123</td>
</tr>
<tr>
<td>United</td>
<td>Cat123</td>
</tr>
<tr>
<td>Anthem</td>
<td>Cat1234</td>
</tr>
<tr>
<td>Medicaid portal</td>
<td>123Cat</td>
</tr>
<tr>
<td>State immunization registry</td>
<td>Catdog</td>
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Password managers

• One single password unlocks your password vault (make it a strong one!)
• Generates unique, strong passwords for each website/account
• Passwords are encrypted & decrypted on your device, not in the cloud

Features include:
• Secure password sharing
• Multiple accounts for same site
• Storage of other frequently-needed info (credit card info, mailing address, NPI list)
• Option to include second-level authentication (biometric, fob)
• Security tools

High-quality password managers include: LastPass, Dashlane, and StickyPassword
Project management apps

Use project management apps for:

• Tracking complicated projects: multi-level task lists, file version control, deadlines and reminders
• Completing a single large project over an extended period of time
• “Downtime tasks” that can be picked up and worked on by anyone

Project management apps include Basecamp, Wrike, Asana, and Trello.

HIPAA-compliant ones include Teamwork.com
How to use Excel for good & awesome

- **PivotTables:** convert thousands of lines of raw spreadsheet data into nice digestible summaries – in the grouping(s) YOU want

  bit.ly/1hvRzTW
  bit.ly/1IsIqhU
COUNTIF(), SUMIF(), AVERAGEIF()

How many Medicaid payments are in this group?
=COUNTIF(B:B, “Medicaid”)

What is the sum of the commercial payments in this group?
=SUMIF(B:B, “commercial,” C:C)

What is the average Medicaid payment in this group?
=AVERAGEIF(B:B, ”Medicaid”, C:C)

bit.ly/1HvmMsR
Transforms using LEFT(), MID(), & RIGHT()

Susan Alexander
185 West 74\textsuperscript{th} Street
New York, NY
Excel’s VLOOKUP function: list matching

Riverside Pediatrics
Roster of PrimeCare Members
- Andrews, Abby
- Baker, Bill
- Ciegelski, Carla
- Edwards, Ellen
- Flowers, Francisco
- Garza, Gillian
- Ignacio, Ingrid
- Johnson, Jack

PrimeCare MCO
Roster of Riverside Patients
- Andrews, Abby
- Ciegelski, Carla
- DiStefano, David
- Edwards, Ellen
- Garza, Gillian
- Haberman, Helen

bit.ly/1m7zFja
Adobe & PDFs in your medical office

• Adobe Reader: read and fill in existing PDFs (free download)
• Adobe Acrobat: create, edit, markup PDFs ($110, one time license)
• Adobe Sign: web-based tool that allows you to send PDFs for completion and signature ($30/month+ depending on volume)

Be sure all your staff know how to:

-- export to/print to PDF (don’t print and rescan!)
-- convert between other document types (spreadsheets) and PDF
Ways to use Adobe Acrobat

• **PDF templates: make your own “Form Wizard”**
  • For frequent documents you must create, when they can’t be easily generated from within your EMR
    - FMLA forms
    - Disability forms
    - Asthma/allergy plans
    - School “OHI” forms

PDF templates can be completed *en masse* with “PDF merge” (like mail merge) feature

**PDF mass searching:** with one click, search all 300+ EOBs in this folder for all instances of rejection code “B15”

**PDF scripting:** split PDFs into single pages, delete pages all without text, extract all claim numbers

Learn more at: acrobatusers.com, evermap.com, pdfscripting.com
Adobe Sign – get signed forms

“All our active patients need to complete and sign an updated Financial Responsibility Form beginning 1/1/2017.”

New workflow:
1) Post form on website, send email link, or have iPad/laptop kiosk in office
2) Parents complete form digitally
3) You can require authentication through social media sign-on, individual emailed password, knowledge base verification, or text/SMS verification
4) Completed/signed form arrives in Box, Google Drive, or by email (no scanning needed)

Other solutions: employee HR forms, teacher ADHD/behavioral forms
Now possible: custom scripting

What if you could automatically *(and in a HIPAA-compliant way)*:

• Check the Medicaid portal for all “no insurance” kids in your practice, and download the results into another spreadsheet?

• Fax a “friendly-reminder” note to specialists about all referral notes that are more than 2 weeks overdue?

• Submit a prior authorization form for every kid in your practice on a nonpreferred stimulant?

• Upload all the newborn hep B doses, nutrition counseling, and BMI results to your insurer’s P4P portal?

• Download all your practice’s BCBS claims in “Rejected for Stupid Reason” status, and auto-generate an appeal letter for each one?
Custom scripts can connect 2 or more of:

<table>
<thead>
<tr>
<th>Type of application</th>
<th>Examples of HIPAA compliant services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webapp hosting</td>
<td>Microsoft Azure, Amazon Web Services</td>
</tr>
<tr>
<td>Cloud-based files (spreadsheets, PDFs)</td>
<td>Google Suite, Box</td>
</tr>
<tr>
<td>Electronic faxing (send and/or receive)</td>
<td>eFax, Interfax</td>
</tr>
<tr>
<td>Document creation and signature</td>
<td>Adobe Sign</td>
</tr>
<tr>
<td>Websites</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>Encrypted clients</td>
</tr>
<tr>
<td>Secure IM</td>
<td>TigerText</td>
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What’s an API?

- Application Programming Interface: structured way to send & receive data from a webservice

<table>
<thead>
<tr>
<th>When you send...</th>
<th>To the API run by...</th>
<th>The API sends you back...</th>
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</table>
How would I have a custom script written?

• Freelance developers can write code to your specifications
  • Codementor.io
  • Toptal.com
  • Hackhands.com
  • Ask your EMR or IT vendor for recommendations
  • Developer will need to sign your BAA

Cost: depends on scope of project
• Initial cost: several hundred to many thousand dollars to set up
• Ongoing cost: nothing (if no workflow changes) to a few hundred dollars monthly (if you need subscription services to continue)
• Consider splitting development cost with other practices who need the same service
• Consider total ROI
Summary

- Review your workflows to see which steps can be streamlined or eliminated completely
- Encourage preventive changes in their use of email, web browsing, passwords
- Encourage use of organizational tools for projects and resources
- Invest in finding ways to apply basic office software to your medical practice
- Set goals to find out what tools can automate other steps of your workflow