

Running a Tight Ship

DRVS for Pharmacy
Integration

Emma White
Director of Quality & Risk
Management
Cabin Creek Health Systems

Dr. Jerad Bailey
Director of Pharmacy
Operations
Cabin Creek Health Systems



Today's Presenters

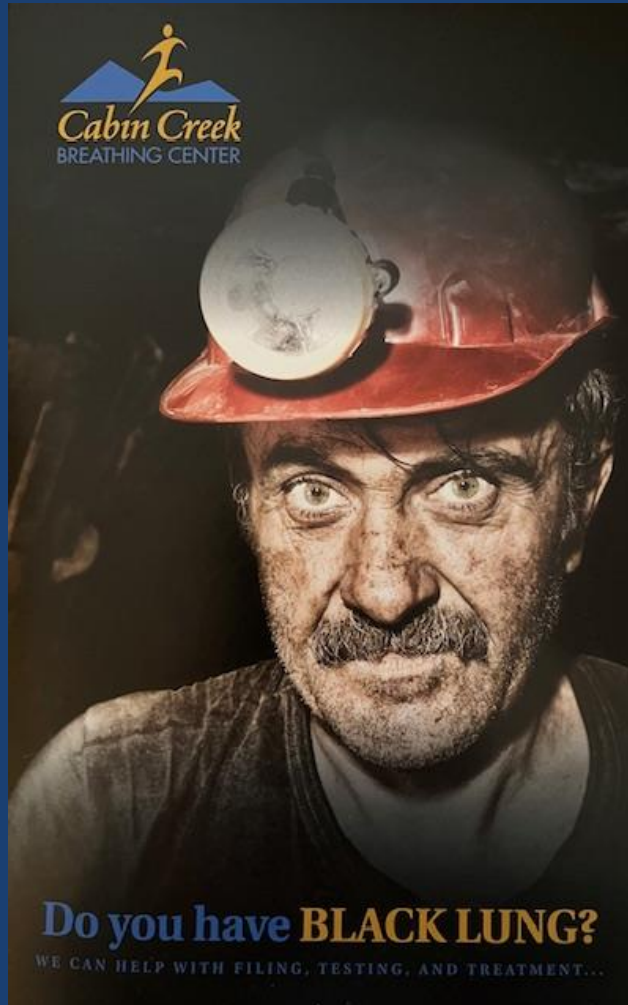


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Introduction



Cabin Creek Health Systems History

- Established by the United Mine Workers of America in 1972 in response to Black Lung and mining accidents
- Coal mining employment has plummeted since the 1980's and Cabin Creek Health Center evolved into an FQHC that now addresses other community health concerns, including behavioral health, chronic disease, and the care of the area's growing elderly population.
- Expansion from one FQHC to create Cabin Creek Health Systems

CCHS Services

- Primary Care
- Pharmacies
- Behavioral Health
- Black Lung Clinic
- Dental Care
- Pulmonary Rehabilitation
- Comprehensive Addiction &
- Mobile Clinic/Community Me
- Pediatric/Adolescent Care
- Women's Health



Who We Serve

7 primary sites, 7 school-based sites

18,669 active users 2023

74,665 qualifying patient encounters

45% of patients have at least 2 chronic conditions



Staff Burnout – COVID 19

- In WV, Community Health Centers **were the front-line COVID 19 response**
- Local Health Departments were under funded and under resourced for years prior to the pandemic
- COVID testing & vaccination became the responsibility of CHCs with assistance from the WV National Guard



The West Virginia Primary Care Association is grateful for Gov. Jim Justice and Joint Interagency Task Force (JIATF) Director Jim Hoyer recognizing the dedication and work of the state's community health centers in the pandemic response during the October 11, 2021, COVID-19 press briefing. Community health centers, with WVPCA support at the JIATF, have been leading these efforts since the pandemic's inception.

The Problem



Provider turnover leading to increased workload



Feelings of anxiety, being overwhelmed



Decreased work-life balance



Staff feelings of being abandoned

HEALTHWATCH >

Burnout threatens primary care workforce and doctors' mental health

#CBSNEWS
HEALTH
WATCH

By Lauren Sausser
June 7, 2023 / 5:00 AM EDT / KFF Health News

Reducing burnout in doctors: Focus on fixing the workplace, not the worker

March 10, 2023
Ron Southwick

A new specter is haunting medicine: pandemic-informed burnout

OCT 20, 2023 • 4 MIN READ By Timothy M. Smith, Contributing News Writer

Solving the Problem

Met with remaining providers to identify needs

- Pre-visit preparation
- Clinical Inbox assistance (patient cases, labs, imaging, document review)

Provide clinical and administrative support

- CMO to assist 2 days/week w/clinical inbox
- Pharmacist to provide Drug Utilization Review for complex, polypharmacy patients

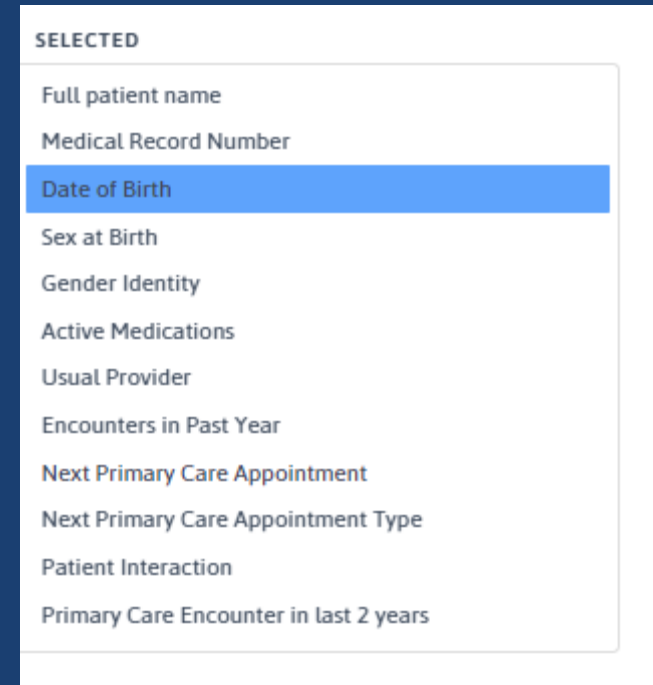
Use data for decision-making

Identify complex “New-to-Me” patients using Azara registry

The Use of Azara DRVS

Identify complex patients with polypharmacy using
registry data elements:

- Demographics
- Usual Provider
- Active Medications
- Encounters in Past Year
- Next Primary Appt
- Next Primary Appt Type
- Patient Interaction
- Primary Care Encounter in last 2 years

A screenshot of a software interface showing a dropdown menu titled "SELECTED". The menu contains a list of registry data elements. The element "Date of Birth" is currently selected and highlighted with a blue background. The other elements are listed in a standard font without highlights.

SELECTED
Full patient name
Medical Record Number
Date of Birth
Sex at Birth
Gender Identity
Active Medications
Usual Provider
Encounters in Past Year
Next Primary Care Appointment
Next Primary Care Appointment Type
Patient Interaction
Primary Care Encounter in last 2 years

New to Me Registry

New to Me Patient Registry

REGISTRY

VISIT DATE RANGE

02/26/2023-02/26/2024

RENDERING PROVIDERS

5 selected

RENDERING LOCATIONS

Clendenin QI group

FILTER

+ Add Filter

Update

REGISTRY

VALUE SETS

Search Patients

SAVED COLUMNS

				NEXT PRIMARY CARE APPOINTMENT				PRIMARY CARE ENCOUNTER					
		ACTIVE MEDICATIONS	QUALITY ENCOUNTER	DATE	PROVIDER	LOCATION	NEXT PRIMARYCARE APPOINTMENT	APPOINTMENT TYPE	DATE	PROVIDER	LOCATION	COUNT	
1	F		27	1	3/18/2024	AGNEW, CHELSEA	CLENDENIN	Est Pt Follow UP	9	9/18/2023	THAYER, JENNIFER	CLENDENIN	3
1	F		4	2	4/5/2024	SMITH, LILY	CLENDENIN	Well Child Visit	1	10/12/2023	THAYER, JENNIFER	CLENDENIN	2
2	F		0	4	4/3/2024	JOHNSON, TRENTON	CLENDENIN	Well Child Visit	1	4/27/2023	THAYER, JENNIFER	CLENDENIN	1
2	F		7	8	3/22/2024	SMITH, LILY	CLENDENIN	Est Pt Follow UP	2	11/8/2023	THAYER, JENNIFER	CLENDENIN	3
1	L		36	2	4/1/2024	GROSE, SHANNON	CLENDENIN	Est Pt Follow UP	1	11/8/2023	THAYER, JENNIFER	CLENDENIN	4
1	F		36	1	3/4/2024	AGNEW, CHELSEA	CLENDENIN	Est Pt Follow UP	7	7/17/2023	THAYER, JENNIFER	CLENDENIN	3
1	F		38	0	2/26/2024	AGNEW, CHELSEA	CLENDENIN	Est Pt Follow UP	1	1/27/2023	THAYER, JENNIFER	CLENDENIN	7
1	F		40	1	3/5/2024	GROSE, SHANNON	CLENDENIN	Est Pt Follow UP	7	7/21/2023	THAYER, JENNIFER	CLENDENIN	3
1	F		37	2	2/28/2024	JOHNSON, TRENTON	CLENDENIN	Est Pt Follow UP	9	9/20/2023	THAYER, JENNIFER	CLENDENIN	9
1	F		54	2	2/26/2024	GROSE, SHANNON	CLENDENIN	Est Pt Follow UP	1	10/12/2023	THAYER, JENNIFER	CLENDENIN	5
1	F		14	2	2/27/2024	GROSE, SHANNON	CLENDENIN	Est Pt Follow UP	9	9/22/2023	THAYER, JENNIFER	CLENDENIN	6
1	F		29	2	3/14/2024	SMITH, LILY	CLENDENIN	Est Pt Follow UP	9	9/7/2023	THAYER, JENNIFER	CLENDENIN	9
1	F		14	2	3/25/2024	SMITH, LILY	CLENDENIN	Well Woman	1	10/18/2023	THAYER, JENNIFER	CLENDENIN	2
1	F		47	3	3/21/2024	SMITH, LILY	CLENDENIN	Est Pt Follow UP	1	11/9/2023	THAYER, JENNIFER	CLENDENIN	8
1	F		18	1	4/15/2024	AGNEW, CHELSEA	CLENDENIN	Est Pt Follow UP	1	10/16/2023	THAYER, JENNIFER	CLENDENIN	4
1	F		55	4	3/4/2024	SMITH, LILY	CLENDENIN	Est Pt Follow UP	1	11/17/2023	THAYER, JENNIFER	CLENDENIN	6
1	F		40	3	3/4/2024	GROSE, SHANNON	CLENDENIN	COMPLEX VISIT	1	11/15/2023	THAYER, JENNIFER	CLENDENIN	8
1	F		15	1	2/29/2024	SMITH, LILY	CLENDENIN	Est Pt Follow UP	6	6/14/2023	THAYER, JENNIFER	CLENDENIN	3
1	F		21	1	3/15/2024	AGNEW, CHELSEA	CLENDENIN	Est Pt Follow UP	3	3/15/2023	THAYER, JENNIFER	CLENDENIN	6
2	F		31	16	3/26/2024	GROSE, SHANNON	CLENDENIN	Est Pt Follow UP	1	11/10/2023	THAYER, JENNIFER	CLENDENIN	7
2	F		25	12	3/29/2024	SMITH, LILY	CLENDENIN	COMPLEX VISIT	1	10/25/2023	THAYER, JENNIFER	CLENDENIN	8
1	F		5	4	3/20/2024	GROSE, SHANNON	CLENDENIN	Est Pt Follow UP	9	9/19/2023	THAYER, JENNIFER	CLENDENIN	7

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Azara Patient Visit Planning Tool



- Implemented the Azara PVP workflow for Clendenin providers & support staff
- Staff reported the PVP was useful with “New to Me” patients to identify care gaps and some abnormal lab values quickly

Azara Care Management Passport

- Staff began utilizing the CMP for the “New to Me” patients identified with the “New to Me” Azara registry
- Once it was explained that the CMP was the equivalent of the “left side” of how paper charts were organized, staff quickly saw the value
- Providers found it useful to get a glance of patient history without mining the patient’s electronic chart before meeting the patient

Jerad Bailey, Pharm.D



- West Virginia native
- West Virginia University School of Pharmacy, Class of 2011
- 2011: Joined CCHS as floating pharmacist after graduation
- 2015: Became lead pharmacist
- 2016: Began working with CCHS' QI Committee
- 2021: Became Director of Pharmacy Operations
- Certificates in pharmacy informatics, continuous glucose monitoring, substance use disorder, and 340B
- Personal interest in data analysis and statistics



Cabin Creek Health Systems Pharmacy Services

Four (soon to be five) in-house 340B pharmacies

Six (soon to be eight) full-time staff pharmacists

Five per diem pharmacists

16 (soon to be about 20) pharmacy technicians

Three pharmacy financial administrators (CPhT-level)

Four pharmacy technician trainees (pre-national certification)

Precepting partnerships with three Schools of Pharmacy



History of Clinical Pharmacy Services at CCHS

Myself

- Periodic drug utilization reviews (DURs) for projects and at the request of providers
- Less frequent as job responsibilities shifted

Pharmacy Students

- Completion of drug utilization reviews at the request of providers
- Shadowing providers and giving real-time feedback
- Student availability has been inconsistent, especially post-2020

Existing Pharmacy Staff

- Historically staffed with pharmacists with little clinical training and low interest
- Recent staff acquisitions have more training and more interest, but no additional time to perform such services

Recent Opportunities

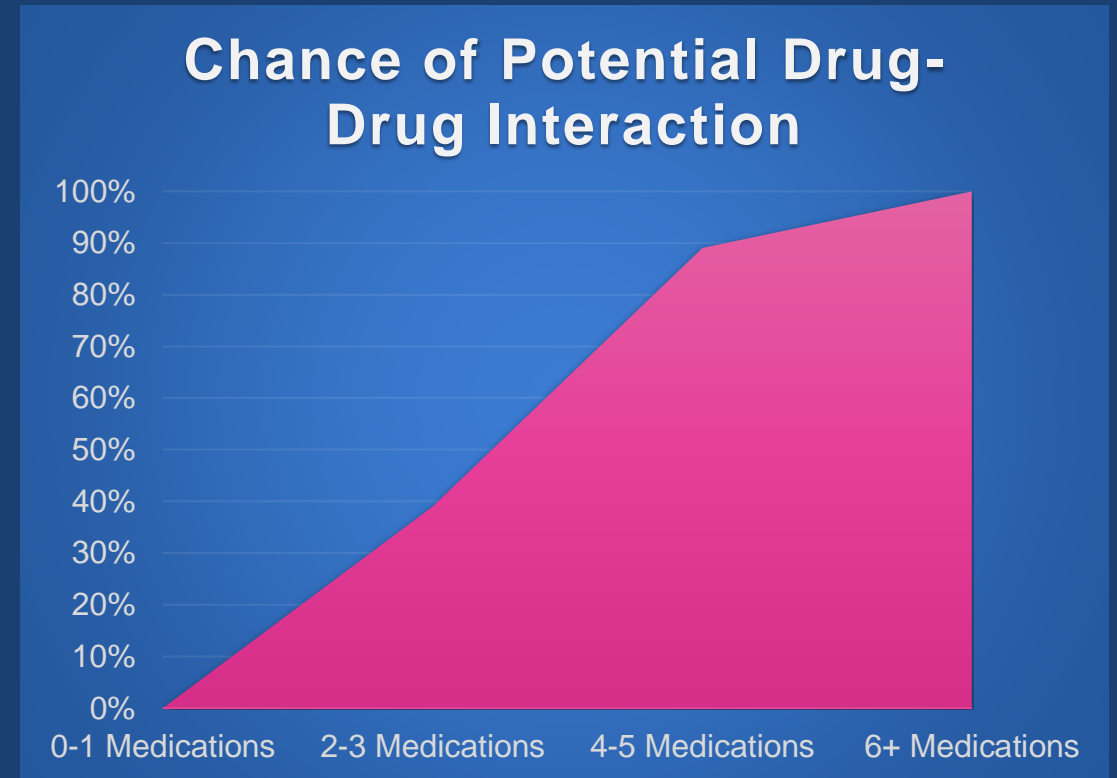
- Several provider departures at one of our sites meant very new providers were being saddled with complicated patients
- One solution discussed was generating pharmacist-performed drug utilization reviews (DURs) for “New to Me” patients
- CCHS’ current per diem roster would enable one of our staff pharmacists, Emily, to have administrative time to generate DURs
- Emily met with providers create a personal connection and to discuss what they felt would be most helpful to their practice

Polypharmacy

A patient's regular use of multiple medications

A patient who uses multiple pharmacies to obtain their prescriptions

There is a **100% chance of a drug-drug interaction** once a patient has been prescribed their sixth concurrent medication.



Mendes-Nett R. S., Silva C. Q., Oliveira-Filho A. D., Rocha C. E., Lyra-Junior D. P. Assessment of drug interactions in elderly patients of a family healthcare unit in Aracaju (Brazil): a pilot study. African Journal of Pharmacy Pharmacology. 2011;5(7):812-818.

Developing the DRVS Registry

Active Medications

- Unique prescriptions written over the last year
- A large number means a higher risk of polypharmacy, higher risk of interactions, and greater chances of being a complex patient

Upcoming Visit Details

- DURs needed to be targeted at patients with upcoming visits
- Identify which (new) provider was going to be seeing the patient

Previous Visit Details

- Identify which (old) provider saw the patient most recently to determine if this would be a “New to Me” patient

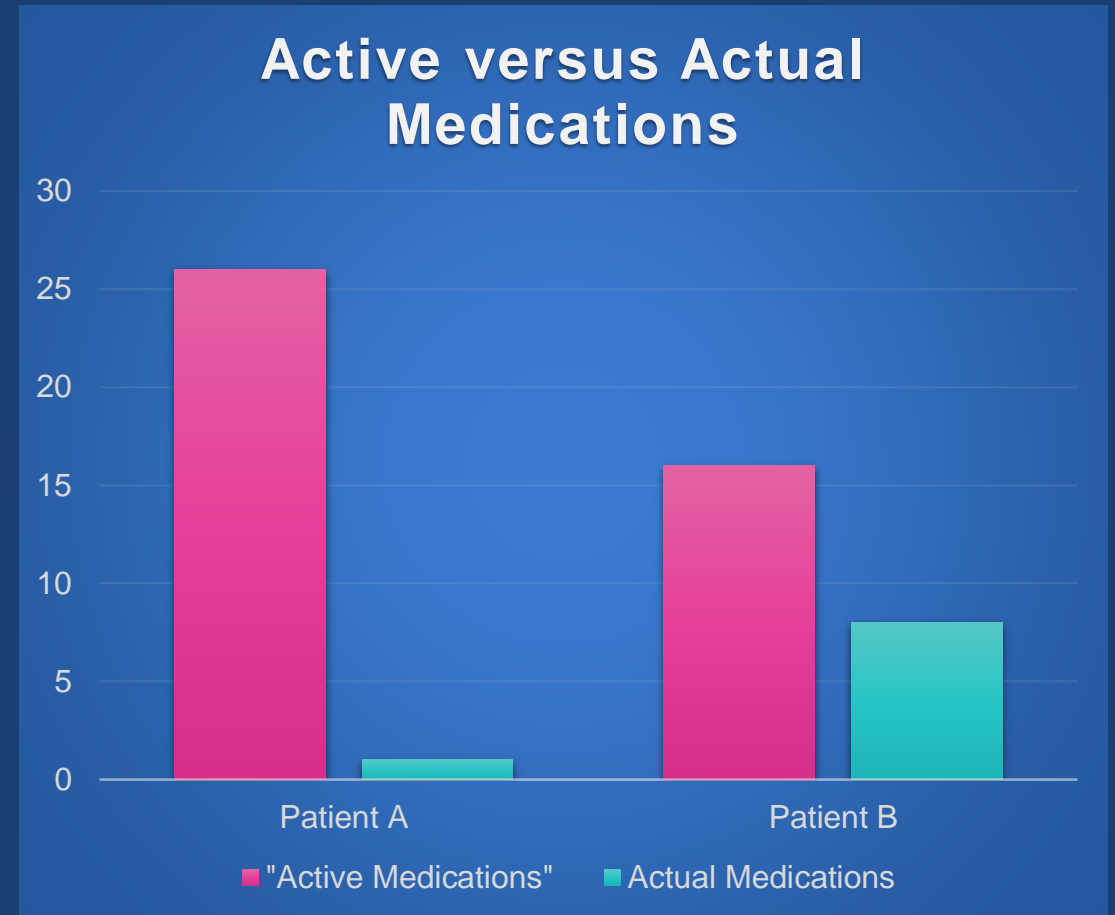
Caveats and Filters: Active Medications

Patient A

Patient with SUD, stable, receiving a bi-weekly prescription of buprenorphine-containing medication

Patient B

Patient with T2DM, HTN, HLP seen every six months for follow-up and receiving 90-day prescriptions



Caveats and Filters: Previous and Next Provider

Combined Filter		Previous Provider		
		Provider A	Provider B	Provider C
New Provider	Provider A	✗	✓	✓
	Provider B	✓	✗	✓
	Provider C	✓	✓	✗

Combining filters for multiple providers means you will run into circumstances where the patients aren't truly "New to Me"

- Best practice (if using DRVS only) is to run each "New to Me" report for each provider separately to prevent the above issue
- (Very) optional: Using an additional tool (in our case, Microsoft Excel and PowerQuery) to apply filters to an exported .xlsx

Workflow: Preparation

10 hours per week were set aside for the Clinical Pharmacist (Emily) to perform Drug Utilization Reviews

- A Per Diem pharmacist was scheduled to cover Emily's dispensing time to create this administrative time
- Days were scheduled several weeks ahead of time due in part to Per Diem availability

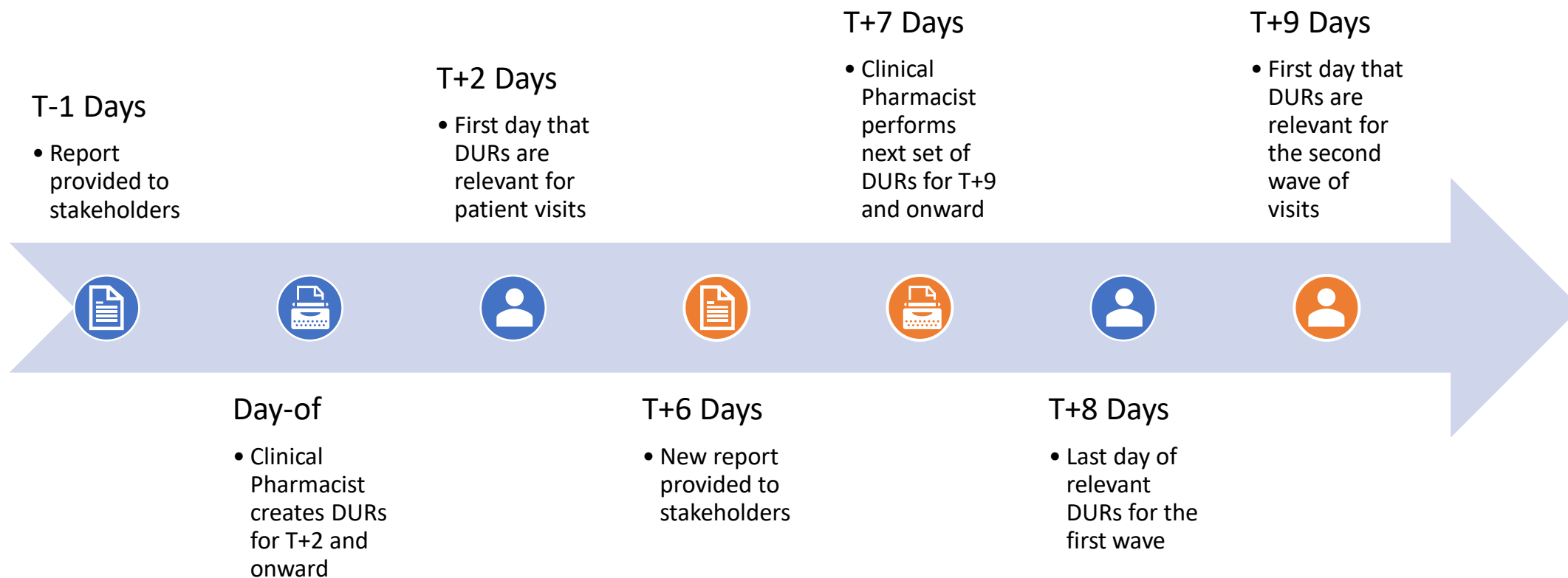
Prior to the administrative day, the "New to Me" registry was run

- Beginning date of T+2, to allow time for administrative processing
- Ending date of the next scheduled administrative date +1 day (same reasoning as above)

Registry report was provided in encrypted email to Emily, providers, and stakeholders prior to the administrative day



Timeline of Events



Workflow: DUR Completion and Dissemination



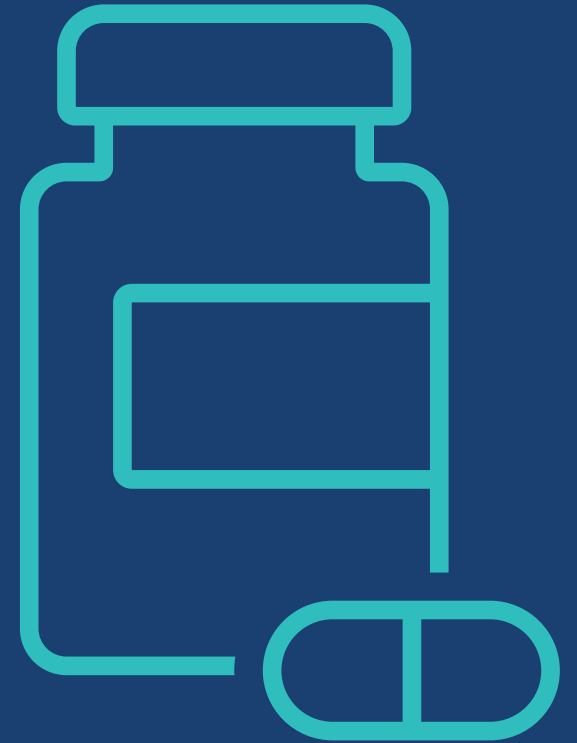
- Clinical Pharmacist was provided private space, laptop, and access to telephone to perform the work
- Clinical Pharmacist would start from the top of the registry and review whether Drug Utilization Review (DUR) was appropriate
 - “Active Medications” versus Actual, last-minute cancelations
- About 5-7 DURs could be completed during the administrative session
- Completed DURs were uploaded to our Electronic Medical Record System (EMR) and routed to the provider via internal Document Processor
- Provider would review the DUR prior to the patient’s appointment



What is a Drug Utilization Review?

Drug Utilization Review (DUR): A pharmacist-driven consultation note focused on the patient's utilization of medications with subsequent optimization recommendations

- Problems without prescriptions / Prescriptions without problems
- Drug-Drug interactions
- Drug-Disease interactions
- Renal dosing adjustments
- Beers list medications
- Lab recommendations
- Medication reconciliation recommendations



Case Study: MM

MM is a 59-yo F with multiple comorbidities

DRVS: 55 “Active Medications”

Retrospective review: About 16
medications – still polypharmacy

DUR performed by Clinical Pharmacist
(Emily)

DUR delivered to provider one day prior
to the patient’s visit



DUR Excerpt

Pharmacy staff are uniquely positioned to **assess medication adherence** in patients.

Identifying nonadherence helps **prevent further polypharmacy** by avoiding prescribing additional therapies for problems.

Provider did not escalate therapies in the following visit; **discussed adherence and effectiveness of medications** during the visit.

- **Adherence:** patient appears to be non-adherent to most of her medications – famotidine filled 6/15 (90d), lisinopril filled 6/15 (90d), metformin filled 9/25 (30d), Symbicort filled 9/5 (30d), gabapentin filled 9/19 (30d)
 - Talk with pt about a strategy which may help her become more comfortable taking her medications daily:
 - **Place medications next to something you do every day** – beside the fridge so you can take them when you eat lunch
 - **Make a mark on a calendar** or piece of paper daily when you take your medications
 - **Alarms and pill boxes** are also an option, but may not be as successful in a pt with schizophrenia
 - Pt does appear to be getting set up with **home health** which may help her get control of managing her medications

DUR Excerpt

Kidney function and renal dosing adjustments are important clinically, but they are **sometimes overlooked** in a non-specialty setting

Clinical Pharmacist **offered a consideration** to decrease gabapentin frequency due to decreased creatinine clearance, as well as warning regarding famotidine in the event creatinine clearance dropped further

Gabapentin dosing was **discussed with patient**, and was adjusted upward due to lack of patient response

Kidney function: patient is due to have labs checked, but CrCl was calculated per last CMP and medications were reviewed for appropriateness given last levels.

- **Calculated CrCl at 42ml/min** – consider decreasing **gabapentin to 400mg bid**
- If kidney function decreases to CrCl <30 – famotidine should be decreased to 10mg qd

DUR Excerpt

Cholesterol medications **require regular lab draws** to determine whether the therapy is being effective

Provider confirmed they would **obtain relevant labs** for the patient at next visit, and as a result, **adjusted patient's statin therapy** from atorvastatin 10mg to 80mg

Hyperlipidemia: patient's last lipid level was done almost a year ago and her dose of atorvastatin has been increased since then. **Redraw lipids** and assess how this medication is working for her.

DUR Excerpt

Patient was on seven different medications that could cause serotonin syndrome or excessive CNS depression, alone or in concert with one another

Patient has bradycardia and chronic diarrhea listed as problems, which could be exacerbated by CNS depressants

Highlighting the number of medications which could cause a particular issue gives the provider insight if a particular problem appears, and which medications could potentially be adjusted to help mitigate those issues

Drug Interactions: patient is on many meds that put her at increased risk of serotonin syndrome and increased CNS depression – **buspirone, fluoxetine, trazodone, oxybutynin, trihexyphenidyl, olanzapine, and gabapentin**

- She has been stable on these medications and many of them are not prescribed by our providers, at this time it is appropriate to monitor her and be aware of any dosage changes that may result in increased likelihood of interactions

Insights: Population and Active Medications

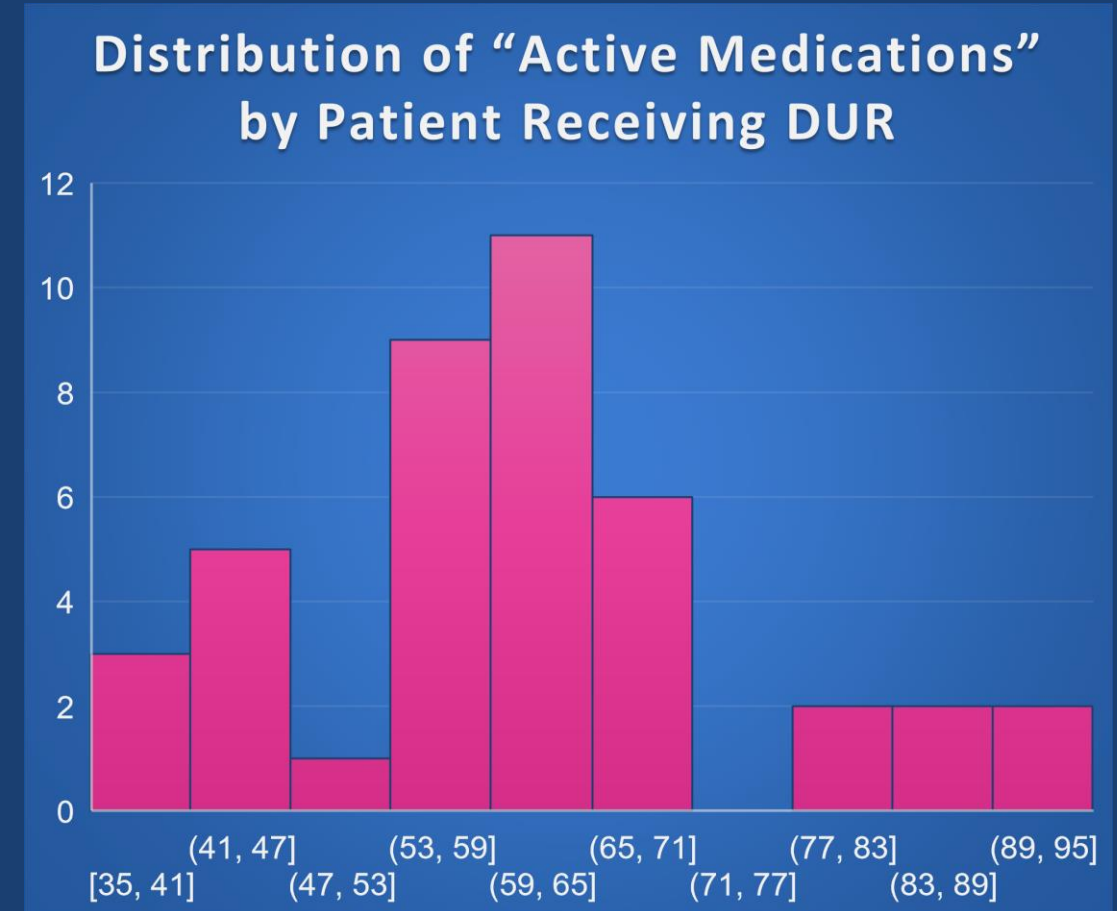
41 Total DURs Performed

- 11/30/23 – 1/25/24

Median “Active Medications”: 61

Max “Active Medications”: 94

- 23 actual medications, for reference



Follow-up Audits



Every week, the charts of patients who received DURs was reviewed to determine the following:

- If the patient has had a follow-up visit since the DUR was completed

- If the provider reviewed the DUR prior to the follow-up visit

- If the provider accepted any of the recommendations in the DUR

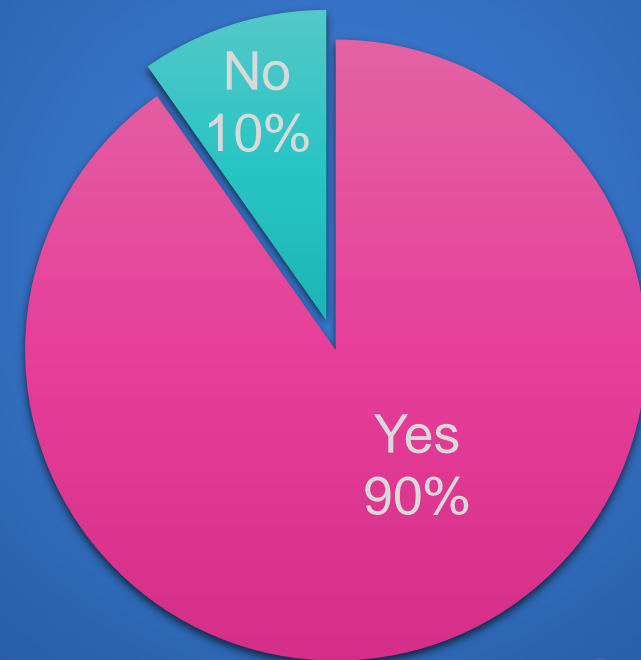
Results: Follow-up visits

About 1/3rd of DURs did not receive the follow-up visit that triggered the need for the DUR within three months

“New to Me” Registry identified these patients as complex and high-risk

Highlighted the **need for follow-up** with **high-risk patients**

Patients Receiving Follow-up Visits Post-DUR



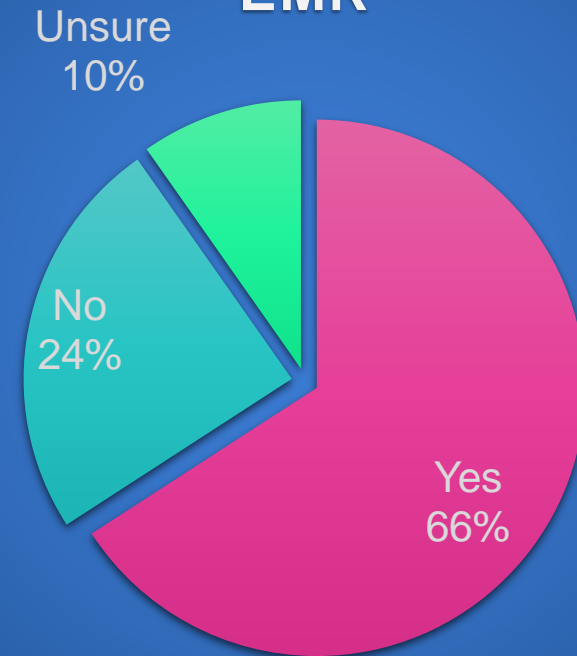
Data as of March 29, 2024

Results: Provider Review

DURs are only valuable if they are reviewed by the provider; provider buy-in is crucial

While providers verbally confirmed that they have been reviewing DURs, the chart accounts for documented evidence in the patient's medical record that a DUR was reviewed

Evidence DUR Reviewed in EMR

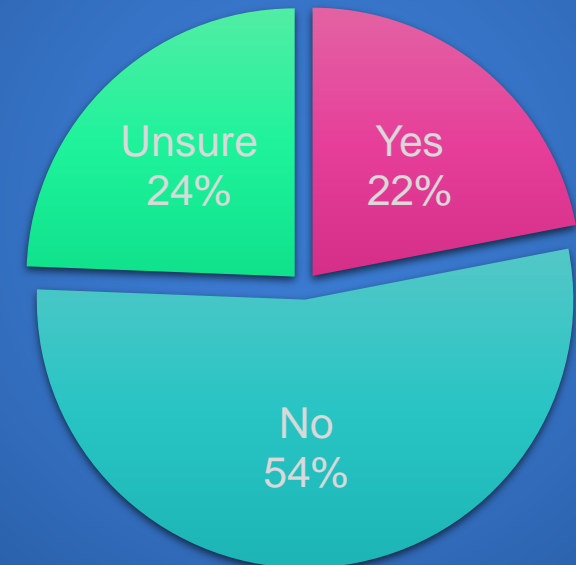


Data as of March 29, 2024

Results: DUR Recommendations Accepted

- DURs are ultimately recommendations and guidance
- Sometimes recommendations are not actionable (e.g. specialist intervention)
- Clinical Pharmacist may be working from limited data / interactions with the patient

Evidence DUR Recommendation Accepted



Data as of March 29, 2024

Results: Benefits of the Project

Instances of confirmed pharmacist-driven intervention

- **Patients are getting better care**

Builds rapport between the pharmacy department and the providers

- Exposure to the pharmacy department as a clinical ally, not just a dispenser, means an increased interest in pharmacy services by providers

Builds rapport between administrative staff and providers

- During a time of severe burnout, compassion fatigue, and moral injury, **meaningful contributions** to support providers go a long way

Paves the way for additional pharmacy-related support activities

- Remote Patient Monitoring (RPM), Chronic Disease Management, supporting Care Navigation, etc.

Results: Provider Interviews

- Drug Utilization Reviews were helpful, but tracking them down in the EMR was a challenge
- The Patient Visit Planning tool was less useful for providers with experience with the EMR, but could be valuable for providers with low tech-literacy or low EMR mastery
- The Care Management Passport could be more useful if it included more information like specialists, surgical history, and (overdue) labs
- Medication Reconciliation is a common pain-point
- Pre-visit interventions, such as pre-ordering overdue labs and medication reconciliation via phone ahead of time, could maximize time spent with patient/s

How the Workflow Could Have Looked

- Collating the necessary **data**, with one report, in our EMR would not be possible
 - This would likely take a combination of reports and subsequent merging of the results in an outside software solution to get similar results
- EMR reports can be time-consuming
 - Once the parameters are set, the EMR must run the report; some reports are so time consuming, they must be scheduled overnight
- EMR results must be formatted
 - The EMR outputs in CSV, which takes some additional work to get formatted to a readable standard

How Azara DRVS Improved the Workflow



- DRVS collates all the necessary fields into one registry
 - For the “New to Me” registry, we were able to get all desired information in one report
- DRVS outputs data in real-time
 - Adjustments to filters could be made with rapid results; you have real-time feedback if you’ve messed something up, instead of learning the next business day
- DRVS exports to a formatted Excel table
 - The exported reports are useable as-is in stock condition; if you still need to make additional manipulations, some of the work has already been removed



Opportunities for Pharmacists, Pharmacies, and Azara DRVS



- Leveraging 340B and Patient Assistance Programs
 - Identifying patients with high-dollar prescriptions that are not currently using an in-house or “Contract Pharmacy”
 - Identifying patients that may qualify for individual manufacturer patient assistance plans
- Supporting Care Navigation
 - Pharmacists / Pharmacy Students can provide drug utilization reviews to help satisfy some care navigation activities



Additional Tools I Use

- Microsoft Excel
 - Learning curve: Low to Moderate
 - The quintessential spreadsheet program
- Microsoft PowerBI
 - Learning curve: Moderate to High
 - Present data in an interactive, visually appealing way
 - DRVS can output similar visuals
- Microsoft PowerQuery
 - Learning curve: High
 - Perform repetitive tasks and output results quickly
 - E.g. “New to Me” registry export could be automatically parsed into per-site reports, per-provider reports, sorted by polypharmacy risk, etc.
 - Very optional; saved me time personally

Key Takeaways

- Allow providers and staff to be the problem solvers
- Include Clinical Pharmacy Services for additional support and guidance
- Provide support & data
- Use data for decision-making
- **Azara has become our one source of truth for clinical data**
- Evaluate the process regularly
- Provider turnover will always be a challenge, especially in rural areas
- With planning and standard processes, the provider and staff burden can be reduced



Questions?

Emma White RN, BSN, PCMH-CCE
emma.white@cchswv.org

Jerad Bailey, Pharm.D
jerad.bailey@cchswv.org



Achieve, Celebrate, Engage!

ACE'd it? Share your DRVS success story and become an Azara ACE!

Show your organization has used DRVS to **A**chieve measurable results, **C**elebrate improvement in patient health outcomes, and effectively **E**ngage care teams and/or patients. Stories should showcase how DRVS helped your organization overcome a challenge, the tools and solutions used to drive improvement and details of the successes that resulted from your initiatives. ACEs should be able to provide examples that quantify quality improvement, cost savings, operational efficiency or patient health improvement.

Benefits:

- Azara will help tell your story and provide a client-branded version for your use
- Potential to create a 2-4 minute video or hour-long Azara-hosted webinar
- Win Azara swag!



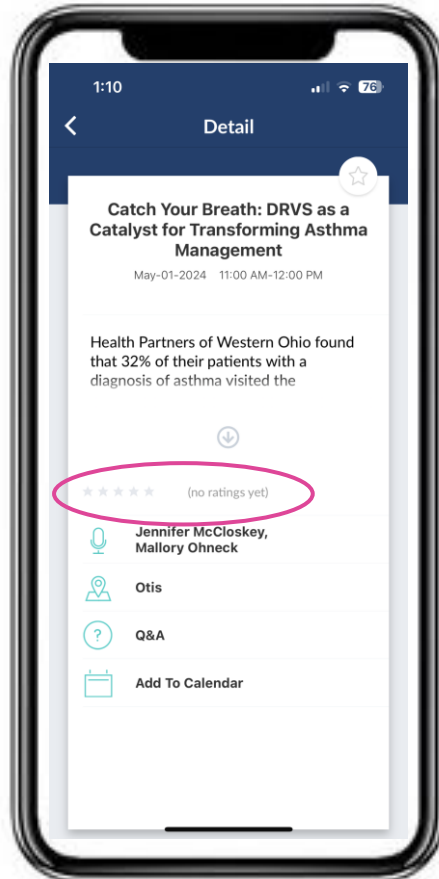
Submit your success story by completing the form [at this link](#) or scan our QR code:

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