

Legacy Pharmacy Services Annual Report

FISCAL YEAR 2022



Legacy Pharmacy Services



Contents

Message from Majid Tanas, Vice President of Pharmacy	1
Core Beliefs, Vision and Mission	3
Legacy Pharmacy Services by the numbers	4
Map of Legacy Pharmacy Services locations	5
Legacy Emanuel Medical Center, Randall Children’s Hospital and Unity Center for Behavioral Health inpatient pharmacies	6
Legacy Good Samaritan Medical Center Inpatient Pharmacy	7
Legacy Meridian Park Medical Center Inpatient Pharmacy	8
Legacy Mount Hood Medical Center Inpatient Pharmacy	9
Legacy Salmon Creek Medical Center Inpatient Pharmacy	10
Legacy Silverton Medical Center Inpatient Pharmacy	11
Legacy Medical Group-based pharmacy services	12
Medication Management Services	13
Apothecaries	14
Population Health pharmacy services	15
Pharmacy Compliance	16
Medication Safety	17
Clinical Systems	18
Pharmacy Operations and Systems Team	19
Pharmacy Residency Programs	20
Celebrating Legacy Pharmacy's service to the community during COVID-19	inside back cover

Message from Majid Tanas, PharmD, MHA, MS Vice President of Pharmacy and Chief Pharmacy Officer



*Majid Tanas, PharmD, MHA, MS,
Vice President of Pharmacy and
Chief Pharmacy Officer*

It is my pleasure to report on the annual achievements of Legacy Pharmacy Services. In this annual report, I look forward to highlighting our team's significant accomplishments and the events and initiatives that inspired them.

Our mission to provide safe, sustainable and effective pharmacy services is a core value for all our teammates.

The past year was unrivaled in its challenges, but Legacy Pharmacy Services came together to rise to those challenges. This commitment was made possible because of the dedication and diligent work of our pharmacists, technicians, support staff and leadership team. The pandemic created an environment of unforeseen stress and pressure, but Legacy Pharmacy shined through it all. I want to thank each member of our amazing team: You have endured so much during the past two years and have remained an unwavering beacon of help for our patients.

The year started with the intense work of vaccinating Legacy's health care providers. Despite a sometimes unpredictable vaccine supply chain, our team selflessly stretched its capacity to support three mass vaccination centers at Legacy Emanuel, Legacy Salmon Creek and Legacy Silverton medical centers. A big thanks to our pharmacy leaders and their teams for coordinating and managing these efforts.

Serving our community to provide vaccinations was an immense undertaking. Many of our pharmacists and technicians rose to the challenge of aiding in this work by preparing and administering COVID-19 vaccinations. Through a collaboration with other health systems in the Portland area, All4Oregon established a massive vaccination center that administered as many as 8,000 doses a day. At one point, ours was the fifth largest vaccination clinic in the country, administering a total of more than 650,000 doses. Our team thoroughly enjoyed working with other organizations to help achieve this great success.

Legacy continues to support the city by operating one of All4Oregon's 14 vaccine redistribution hubs, distributing vaccines to non-Legacy provider clinics in the region.

Thank you to our pharmacy staff for managing this important work during the past year.

In alignment with Legacy's journey to grow into a health management company, Legacy Pharmacy continues to grow and meet patients' needs wherever they are. In the past year, Legacy Salmon Creek received accreditations from the Utilization Review Accreditation Commission (URAC) and Accreditation Commission for Health Care (ACHC), thus allowing our specialty pharmacy to have access to limited drug distributions. Our pharmacy system team led the important work of expanding our 340B eligible clinics. This expansion will allow us to develop programs to ensure patients are able to make good use of their medications outside a hospital admission or clinic visit.

We love our team members, and this year we were able to recognize our talented technician staff. We created a technician ladder to recognize the efforts by our team, recruit additional pharmacy technicians, and expand our technician supervisory team across our sites. We also established a technician-driven quality and compliance team. This group has been refining our processes to improve our operations. This compliance team is currently implementing software solutions, such as Simplifi 797 and Bluesight, to help ensure compliance readiness. Our new compliance team is building a firm foundation for our future growth.

We also expanded our leadership team through the promotion and recruitment of outside talent for our sites at Legacy Emanuel, Legacy Good Samaritan and Legacy Mount Hood medical centers. Our team continues to rise to the challenges of day-to-day operations during a pandemic.

We are hopeful for the future. Legacy Pharmacy is one of the gems of Portland and we continue to recognize and focus on the collective strength of our people. With input from our team, we have identified several key opportunities for the near future to achieve our goal of continued clinical and financial success.

— Majid



Legacy Pharmacy Services Core Beliefs, Vision and Mission

Our Why

To strengthen, unify and innovate the way we care for one another and our world.

Our Vision

Be Engaged

Provide the safest medication therapy and to empower patients for better health.

Be Connected

Care for one another. Be vital to our community and world.

Be Innovative

Invest in activities that make Legacy Pharmacy Services essential.

Be a Leader

Be a market leader and practice excellence.

Our Mission

Our mission is to provide safe, sustainable and effective pharmacy services that promote health and healing.



Legacy Pharmacy Services

BY THE NUMBERS

Pharmacy Services team

199	Pharmacists
26	New pharmacists hired in 2021
88	Board-certified pharmacists
23	Pharmacy interns
159	Technicians
45	New technicians hired in 2021
1.3 FTE	Administrative staff
3,285	Total years of employee service
163	<5 years of service
98	5–10 years of service
86	11–20 years of service
23	21–30 years of service
20	>30 years of service
6	Residents PGY1
3	Residents PGY2
27,200	Hours of student training FY21
116	Rotations
39	Unique students
2,370	Non-exempt hours for COVID-19 vaccinations
18,032	Pharmacist visits in LMG clinics

Publications and presentations

9	Peer-reviewed publications
15	Platform or poster presentations

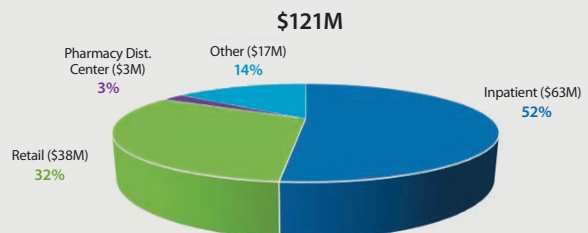
Pharmaceuticals

7,096,788	Doses dispensed
2,000,000	Items processed by distribution center
10,933	Orders verified per day
343	Tier 1 protocols managed per day
231,860	Rx filled in Apothecaries
4,047	Compassionate Care Rx dispensed
\$74,075	Value of Compassionate Care Rx
6,623	Meds-to-Beds patients served LEMC and RCH

Selected financials

\$ 8,248,660	Apothecary annual profit
\$ 1,325,943	LMG pharmacist visit revenue
\$ 15.4 M	340B hospital savings FY22 3QTR
\$ 5.59 M	340B retail pharmacy savings FY22 3QTR

Pharmaceutical purchases FY21



Hospital bed capacity

1,267	Average hospital beds served FY22
--------------	-----------------------------------

Legacy Pharmacy Services

LOCATIONS

Legacy Pharmacy Services includes:

Hospitals

Primary Care Clinics

Specialty services are also supported by Pharmacy

Apothecaries

Medication Management Clinics

Day Treatment/ Infusion Clinics

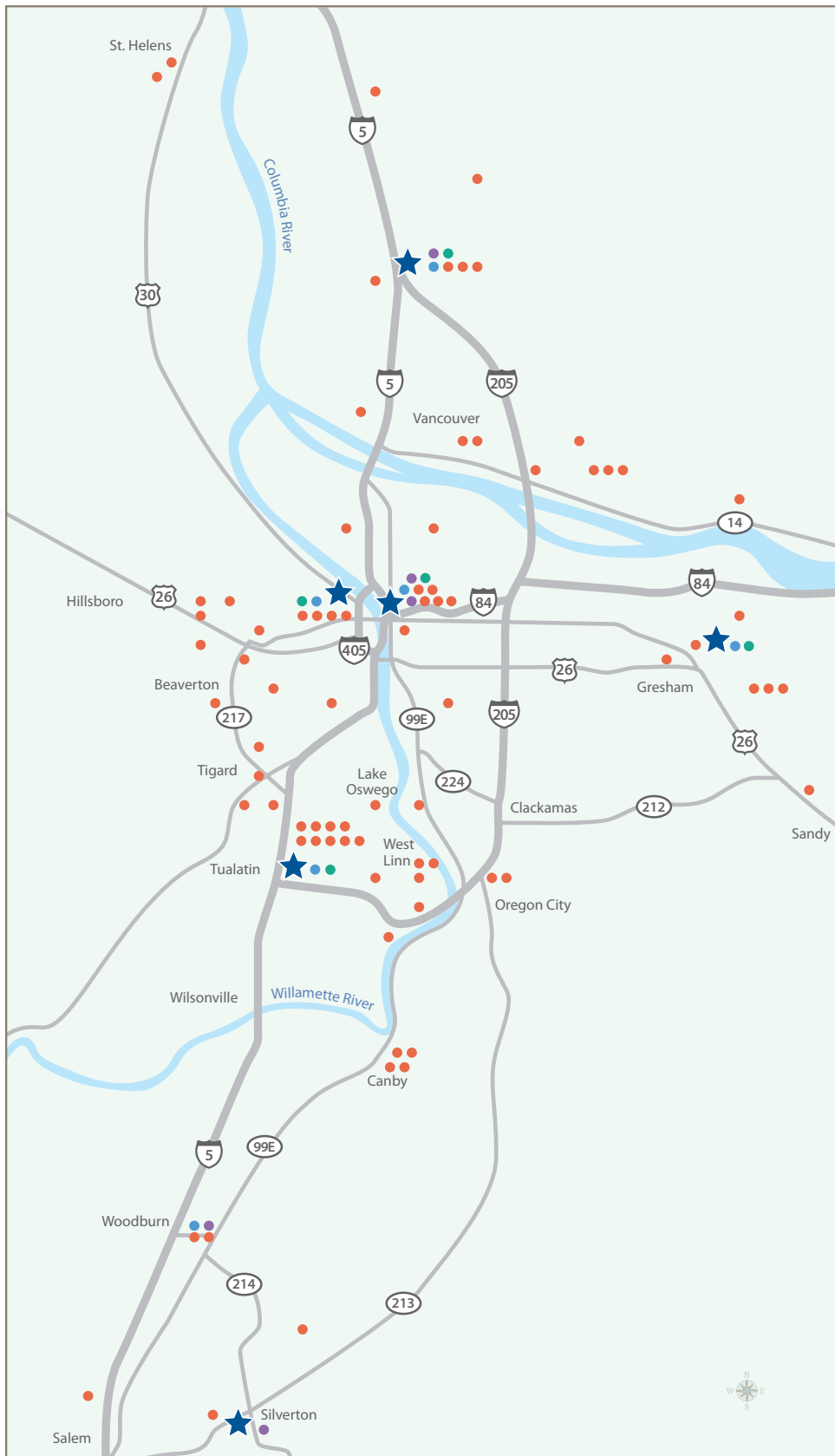
★ Hospitals

● Primary Care Clinics

● Apothecaries

● Medication Management Clinics

● Day Treatment/Infusion Clinics



Legacy Emanuel Medical Center, Randall Children’s Hospital and Unity Center for Behavioral Health inpatient pharmacies

Pharmacy services at Legacy Emanuel Medical Center, Randall Children’s Hospital at Legacy Emanuel and Unity Center for Behavioral Health provides comprehensive pharmaceutical services to some of the most complex patients in the Portland metro area, including patients suffering the highest levels of physical and psychological trauma, burn injuries and congenital diseases. The team of 122 health professionals are entirely committed to ensuring patients receive the right medication for the right reason and that patients are empowered to advocate on behalf of their own health. Pharmacists are integrated into all intensive care (neurotrauma, cardiovascular, burn, pediatric, neonatal), emergency department, internal medicine and psychiatric teams.

Pharmacy services at Legacy Emanuel and Randall Children’s Hospital facilitated the first COVID-19 vaccination administration in Oregon. Members of the two departments supported one of the three “super vaccine clinics” in its first days when COVID-19 vaccinations were being distributed, and addressed the vaccination needs of the roughly 14,000 Legacy Health employees. In parallel, Unity’s pharmacy department continued to successfully advocate and execute tailored vaccination strategies for patients wrestling with behavioral health disorders.

Legacy Emanuel and Randall Children’s Hospital

More than 2 million doses of medications dispensed for admitted and emergency department patients.



Left to right: Tommy Wong, Karolina Kowalewska, David Beltier, Ky San, Serena Sanders

Pharmacy staff report			
	Legacy Emanuel Medical Center inpatient	Randall Children’s Hospital inpatient	Unity Center for Behavioral Health inpatient
Pharmacists	44	15	6
Board-certified pharmacists	16	5	1
Technicians	38	6	6
Interns	6 shared between both sites		0

Unity Center

More than 400,000 doses of medications dispensed for admitted and psychiatric emergency service patients.

- Unity Center’s pharmacy staff supported Legacy hospitals by staging Pfizer-BioNTech COVID-19 vaccines.
- Unity Center’s pharmacy staff implemented a provider targeted quality improvement program resulting in a 50% increase in provider medication reconciliation completion. The ultimate goal was improving patient medication safety.
- Optimized tiered safety huddles to increase team members’ abilities to escalate problems to peers and leaders quickly.

Looking at 2022

Pharmacy services is intending to fully deploy a Lean Kanban inventory process system to optimize inventory control. The department will also be partnering with specialty outpatient clinics to address patients’ barriers to access to care.



Ryan Mickelson, Legacy Emanuel Medical Center

Legacy Good Samaritan Inpatient Pharmacy

Pharmacy services at Legacy Good Samaritan Medical Center supports the clinical areas of critical care, emergency medicine, transplant, physical rehabilitation, general medicine, surgery and outpatient medication management. Our clinical pharmacists are located at each of the clinical service areas to provide real-time access to drug therapy expertise. They partner with physicians and other disciplines to design medication therapies that are individually tailored to each patient.

Legacy Good Samaritan offers robust pharmacy clinical services in the operating room. The team has implemented several best practices improvements this past year. One example: Standardizing pre-operative multimodal analgesia for total joint patients. This was done in conjunction with anesthesia. Another improvement is in glycemic control management for bariatric surgery patients. Our pharmacists have a protocol to manage and dose insulin in bariatric surgery patients.

The Transitions of Care (TOC) Team continues to complete medication histories on more than 90% of patients admitted to the hospital from the emergency department.

Legacy Good Samaritan is the pulmonary hypertension site of care for the Portland area. Pharmacists play a key role in the different therapies for patients with pulmonary hypertension, whether it's initiating a prostacyclin analog therapy or transitioning a patient from intravenous or subcutaneous agents to an oral agent. Kern Critical Care Unit pharmacists are responsible for collaborating with the pulmonary team and providing dosing and monitoring recommendations. In addition, the Kern pharmacy team has played a vital role in the creation and revision of practice guidelines focused on use of high-risk therapies for this inpatient population.

Get Well Network videos and anticoagulation education for patients were reinvigorated. A team

Pharmacy staff report

Legacy Good Samaritan Inpatient Pharmacy	
Pharmacists	35
Board-certified pharmacists	11
Technicians	27
Interns	4
Presentations by staff at conferences in the past year	1

member participated in reviewing these educational tools and determining which patients should be automatically assigned educational information upon discharge. Anticoagulation education is one of the key factors that Centers for Medicare & Medicaid Services and The Joint Commission evaluate as vital for patient safety.

A team member performed most of the background research on the updated IV stability chart that was published for Legacy Health.

Two team members obtained specialty board certification. A pharmacist with oncology board certification was also hired.

Looking at 2022

In 2022, pharmacy services envisions expanding clinical programs to meet the growing needs of the community, such as transitions of care (TOC) and Meds-to-Beds (M2B), expanding ED services and developing the technician career path in those areas as well.

Legacy Meridian Park Inpatient Pharmacy

Legacy Meridian Park Medical Center has a team of 40 pharmacy team members who provide a vast array of services. This includes clinical and distributive services for hospitalized patients; an apothecary pharmacy for employee and patient discharge medication; a medication management services clinic that provides anticoagulation management and other clinical outpatient services; and a centralized pharmacy distribution center (CPDC) that repackages oral medications for all Legacy Health sites. The team strives to do what is best for patients, while fostering a family atmosphere. The team is focused, collaborative and proud of what it does for patients.

- Pharmacy services at Legacy Meridian Park implemented global patient review by all pharmacists.
- The centralized pharmacy distribution center (CPDC) provides non-sterile, unit dose oral solids for all Legacy sites. It also prepared Emergency Department Take Home Packs and added bar codes to products that did not have one to allow for RN scanning and improved safety.

For 2021, the CPDC provided the following:

- Unit dose tablets/capsules: 1,645,202 doses.
- Oral syringes: 51,367 doses.
- Oral cups: 43,500 doses.
- Unit dose MILT products: 12,659.
- Take-home packs: 2,718.
- Bar code labels added: 200,497.

That's a total of 1,912,878 items processed by the CPDC this year!

Pharmacy staff report

Legacy Meridian Park Inpatient Pharmacy	
Pharmacists	21
Board-certified pharmacists	6
Technicians	1
Interns	2
CPDC	4
Presentations by staff at conferences in the past year	1

Legacy Mount Hood Inpatient Pharmacy

Pharmacy services at Legacy Mount Hood Medical Center provides comprehensive pharmaceutical services to the East Portland area, which serves East Multnomah County along with a vast number of rural communities.

The pharmacy team, consisting of about 40 employees, offers five decentralized clinical services to internal medicine, surgery, critical care, progressive care and one of the busiest emergency departments in our health system. In addition, the pharmacy team at Legacy Mount Hood provides robust transition of care and ambulatory care services with pharmacists leading multidisciplinary staff to address barriers to care and to manage chronic conditions.

The team at Legacy Mount Hood is dedicated to advancing the pharmacy profession by incorporating students, interns and residents into the patient care team and promoting a culture of learning and discovery.

Opportunities were created for high-performing staff to gain additional experience and responsibilities within the department through position promotions.

- Pharmacy reported 46% of all reports on ICARE by the hospital during the past year, reflecting a culture of safety here.

Achievements in 2021

- A new pharmacy director and 10 new staff members were welcomed and successfully onboarded.
- Six staff members volunteered to assist with the COVID-19 mass vaccination operations at the Oregon Convention Center.

Pharmacy staff report

Legacy Mount Hood Inpatient Pharmacy	
Pharmacists	24
Board-certified pharmacists	10
Technicians	14
Interns	2
Peer-reviewed journal articles by staff in the past year	1
Presentations by staff at conferences in the past year	1

Looking at 2022

A pharmacy remodel is underway to accommodate expansion of the IV preparation area. The remodel addresses the growing needs of the organization and ensures continued regulatory compliance.

The team will establish a formal pharmacy intern program, which will provide opportunities for pharmacy students to gain experience in hospital pharmacy. The program goal is to prepare them to enter the profession as a pharmacist.

The team will also expand opportunities for continued education of pharmacists and pharmacy technicians in order to promote professional growth in areas such as precepting, cultural competency and medication safety.

Legacy Salmon Creek Inpatient Pharmacy

Pharmacy services at Legacy Salmon Creek Medical Center cares for patients and their medication needs across the continuum of care from the hospital to the infusion clinics, retail pharmacies and medication management clinic. The team ensures that patients have the right drug and dose for their diagnosis and financial situation.

In 2021, the team was able to pivot to the needs of the community by offering a hospital-based COVID-19 vaccine clinic, as the rest of the Legacy system focused on mass vaccination efforts at the Oregon Convention Center. This accomplishment was due to the pharmacy team's ability to adapt and handle change. The clinics opened the eyes of the team, which is usually inpatient focused, to the importance of care that normally happens outside the four walls of the hospital.

- Provided almost 40,000 vaccinations as a site-based hospital community COVID-19 vaccine clinic.
- Started a medication assistance program for infusion clinic patients.
- Cared for the highest percentage of COVID-19 positive patients in the Legacy system.

Looking at 2022

The team will continue to provide new and innovative care options for our patients through our MMS clinic, and will expand the disease states we can care for in order to improve patient outcomes and patient satisfaction.

The team is also looking to add pharmacy patient counseling to our oncology clinic, and to have a pharmacy-owned process for prescriptions from that clinic.

Pharmacy staff report	
Legacy Salmon Creek Inpatient Pharmacy	
Pharmacists	38
Board-certified pharmacists	13
Pharmacy resident	1
Technicians	38
Interns	6

Legacy Silverton Medical Center Inpatient Pharmacy

Pharmacy services at Legacy Silverton Medical Center is a progressive team that serves a rural hospital population in the heart of Oregon’s Willamette Valley.

In February 2021, pharmacy services expanded its daily hours of operation, from 15 to 24 hours a day. Night pharmacists now spend a portion of their shift in Legacy Silverton’s emergency department assisting its medical staff. This has been met with positive feedback. The house supervisor is no longer required to compound intravenous medications during nighttime hours.

Some of the other accomplishments of the pharmacy team include:

- Decreased time from arrival to administration of alteplase.
- High satisfaction from emergency department staff regarding expansion to 24-hour pharmacy services.
- Began planning for department remodel and replacement of automated dispensing cabinets (ADCs) reaching end of life.
- Recognized by organization for controlled substance diversion monitoring.

Looking at 2022

- Remodel of pharmacy department to ensure compliance with USP requirements.
- Implement upgrade of ADCs.
- Deploy standard operating patterns for medication reconciliation and meds-to-beds.

Pharmacy staff report

Legacy Silverton Inpatient Pharmacy	
Pharmacists	9
Technicians	7



Left to right: Taylor Goodman, Fidelis Chow



Left to right: Kathy Coy, Shawn Pasco, Lorraine Taylor



Left to right: Christine Nguyen, Melody Carroll, Camille Sullivan

Ambulatory Care

Legacy Medical Group-based pharmacy services

Clinic-based pharmacy services provide a layer of medication support and safety to the Legacy Medical Group (LMG) primary care clinic sites. The pharmacists act as physician extenders under collaborative practice agreements, help patients use their medications safely and achieve wellness goals. Pharmacy technicians embedded in these sites support refill and prior authorization workflows, improving turnaround time. The LMG pharmacy team also provides oversight of medication room management and support for patient enrollment in medication assistance programs.

In 2021, pharmacist time expanded at several clinic sites along with increased technician time to help with increased workload in covered clinics. Collaborative agreements were expanded and re-formatted to be in line with Legacy policy and procedural standards.

Steps have been made toward ensuring capability for centralization of medication technician team. This ensures that all staff are familiar with remote workflows, institutes greater coverage capability and identifies holes in refill process work queues.

- Pharmacists are embedded in 20 primary care clinics and utilize 12 collaborative practice agreements for patient management:
 - New referrals: 1,821.
 - Longitudinal paneled patients: 959.
 - Clinical metrics: average A1C reduction of 1.04%.
- Medication technicians provided refill and prior authorization support in 24 clinics, processing the majority of the annual 412,100 refills and 8,000 prior authorization requests.
- The medication assistance program helped 549 patients this year, with 1,006 prescriptions worth a total of nearly \$2.7 million in benefit.
- The ambulatory pharmacist team saw year-over-year growth in volume and revenue despite the

Pharmacy staff report	
Legacy Medical Group pharmacy services	
Pharmacists	14
Board-certified pharmacists	13
Pacific University faculty	2
Pharmacy residents (PGY2)	2
Technicians	30
Interns	2
Peer-reviewed journal articles by staff in the past year	6
Presentations by staff at conferences in the past year	10

pandemic.

- Pivoting from in-person office to telehealth visits allowed the team to continue to provide exceptional clinical care. Partnering with Legacy’s professional billing team and the adoption of novel billing and reimbursement models contributed to an increase in the number of billable visits not previously possible.

The ambulatory pharmacy team debuted its continuing medical education series for primary care providers. The series received positive reviews from providers and pharmacy staff and raised attention to the value of integrated pharmacy services within LMG.

Looking at 2022

A goal of achieving consistent accessibility to primary care pharmacy services across all LMG primary care structures by employing a standard staffing model and piloting criteria-based referrals for the pharmacists.

Additionally, expect centralization of technician staff forthcoming to provide more consistent clinic support even in the face of staffing shortages.

Streamlined medication assistance program workflows.

Medication Management Services

Medication Management Services (MMS) provides pharmacist services like those provided by Legacy Medical Group (LMG) clinic-based pharmacists. But its model provides greater accessibility to patients in the wider Legacy Health Partners (LHP) provider community. Formerly known as the Legacy Anticoagulation Clinics, these hospital outpatient departments now provide a way to optimize management for a wider array of drug therapies benefiting both providers and their patients.

MMS departments now serve as clinical care sites for patients who require specific specialty pharmacy medications, such as those used to treat hepatitis C. Not only does this provide a way to qualify prescriptions for the 340B discount program, but the savings also contributes to Legacy's bottom line and increases the ability to reinvest that money into tangible services serving our vulnerable patient populations.

Other highlights include:

- Six MMS staff volunteered regularly to help with COVID-19 vaccination efforts in early 2021.
- Made steps to integrate MMS pharmacist model with LMG pharmacist model.
- Maintained high quality of care despite a slight shift from in-person office visits to a higher number of telephonic support of patients.

Looking at 2022

Grow patient referral volumes through specialty pharmacy prescription capture and pharmacy resident projects. Expand scope of disease state management care. Partner Legacy Population Health with MMS so they strive together toward higher Centers for Medicare and Medicaid Services star rating, financial sustainability and greater LHP provider satisfaction from having access to Legacy clinical pharmacy services.

Pharmacy staff report

Medical Management	
Sites	5
Pharmacists	25
Board-certified pharmacotherapy specialists	5
Board-certified cardiology pharmacists	2
Board-certified ambulatory care pharmacist	1
Support staff	3

	MMS	Published benchmark
Total number of patient encounters	1,861	NA
Percentage of INRs in goal range	62.07%	55–64%
Clotting events per 100 patient years	1.72	11.8 for usual care 3.3 for other anticoagulation clinics
Major bleeding events per 100 patient years	1.72	3.9 for usual care 1.6 for other anticoagulation clinics



Left to right: Jenna Hill, PharmD; Rachel Givens, PharmD; Victor Tran, PharmD.

Apothecaries

Legacy Health's apothecaries pharmacy team provides community-based medication dispensing services to employees, community members and patients discharging from the hospitals. Six pharmacy sites deliver value to patients through traditional retail pharmacy care and mail order prescription services. In addition, the different apothecaries are focused on expansion of the bedside discharge medication delivery service to ensure patients go home with medications in hand. Finally, Legacy patients who require access to specialty drugs can expect seamless integration between drug delivery and clinical follow-up care during treatment.

In 2021, Legacy Salmon Creek Medical Center's apothecary received accreditation from the Utilization Review Accreditation Commission (URAC) and the Accreditation Commission of Health Care (ACHC). Meeting accreditation standards supports Legacy's strategic goal of expanding the specialty pharmacy program.

In 2021, specialty pharmacy services generated over 8.2 million dollars in net revenue.

- Meds-to-Beds patients served: 6,623 (Legacy Emanuel Medical Center and Randall Children's Hospital at Legacy Emanuel combined).
- Number of prescriptions filled: 231,860.
- Compassionate care prescriptions dispensed: 4,047, amounting to a dollar value of \$74,075.
- Improved inventory management and revenue reporting capability by implementing Epic technology toward financial sustainability.
- All apothecaries translated prescription labels and patient handouts into 14 different languages on the path toward improved patient safety.
- Provided significant support for COVID-19 vaccination efforts with eight staff volunteers. One staffer also volunteered for a pet rescue program.

Pharmacy staff report

Apothecaries	
Pharmacists	15
Technicians	24

Looking at 2022

Legacy's apothecaries team intends to improve existing service levels and drive more of Legacy's patients to use apothecaries in 2022 by focusing on continued expansion of specialty pharmacy services and developing concierge pharmacy services for non-specialty medication patients. Improving script capture within the system increases revenue and maximizes potential 340B savings that can then be reinvested to further expand services and support for our patients.



Left to right: Amy Zacher, Laura Cortez



Marlon Broussard

Population Health pharmacy services

Legacy Health population health pharmacists work alongside health coaches, nurse case managers and the patient's core care team. The goal is to optimize care for patients where shared risk agreements exist within Legacy Health Partners and the Legacy Employee Health Plan. The population health pharmacy team's role is to ensure medication access, help the patient design medication therapy goals and support the patient's adherence plan under the same collaborative practice agreements utilized by Legacy Medical Group-based pharmacists.

Pharmacist engagement with patients was previously based on identification of medication issues during the nurse case manager's intake interview. Today, pharmacists complete the patient's medication review and assessment for medication related problems upstream, during the actual enrollment process.

Patients served

- Since program inception, 2,160 patients have been served, with an average of 301 days per patient enrolled in the program.
- Currently, 175 patients are stratified and participating in the program.

Clinical outcomes

- Reduction in average A1c from 8% to 6.9% for patients graduating from the program.
- Healthcare effectiveness data and information star (HEDIS) measures:
 - 50% increase of patients with controlled blood pressure.
 - 10% increase in statin use in cardiovascular disease.
 - 14% increase in statin use in diabetes.

Financial outcomes

- Per member per month cost (PMPM) reduction of 18.83% for patients graduated from the program.

Pharmacy staff report

Population Health pharmacy services	
Pharmacists (one vacancy)	4
Board-certified pharmacists	4
Peer-reviewed journal articles by staff in the past year	2
Presentations by staff at conferences in the past year	2

Achievements in 2021

- Moving pharmacists upstream in the patient enrollment process improved the ability to identify medication related problems and improve efficiency in patient referral to pharmacist care.
- Population health pharmacists actively contributed to improvements in pharmacy focused HEDIS star measures and lower cost of care for patients in the program.

Looking at 2022

Embed population health pharmacists with the medication management service in order to support expansion of clinical services provided in these departments and decrease the burden on the patient's primary care office. This model will also allow for increased 340b medication qualifications. In addition, we expect to expand this service in order to have a greater impact on Center for Medicare and Medicaid Services (CMS) five-star quality ratings for the organization, and for increased MTM support for Legacy patients.

Pharmacy Compliance

This new team of 10 people includes a pharmacy director of compliance and eight pharmacy technicians. The service line is dedicated to supporting pharmacy leaders and the organization to achieve and maintain compliance with pharmacy regulations that ensure employee and patient safety. This work assists in streamlining processes, ensuring completion of mandatory regulatory requirements and fostering continuous quality improvement.

Strategic changes in 2021

A systems approach to auditing records and quality metrics began throughout the pharmacy enterprise.

Other changes:

- Building and implementing a proactive diversion surveillance program.
- Improving required DEA and Board of Pharmacy metrics. This includes review of overrides, discrepancies and inventories, among other things.
- Supporting and ensuring successful passing of Board of Pharmacy inspections.

Pharmacy staff report

System Support — Pharmacy Compliance	
Pharmacists	1
Board-certified pharmacist	1
Pharmacy technicians	8

Achievements in 2021

- USP800 project progression; go-live spring 2022.
- Creation of diversion prevention program.
- Build and roll out of controlled substance diversion prevention program.
- Cleanroom pharmacy team built to support standardized and expert approach to building of cleanrooms.



Medication Safety

Medication safety promotes quality patient care by collaborating with multidisciplinary stakeholders to improve the safety of the medication use process for the protection of all Legacy Health patients. The Medication Safety Officer and Committee advocate for transparency and a culture of safety through initiatives driven by patient safety reports and best practices from national safety organizations.

Achievements in 2021

- Medications and vaccines under Emergency Use Authorization (EUA) for COVID-19 treatment and prevention required mandatory reporting by health care providers for serious adverse events and medication errors. The medication safety officer was responsible for coordinating the submission of reports in multiple national safety reporting systems for harm events at Legacy and the regional vaccination clinic.
- To support a culture of learning, patient safety events that had broad impact across the system or resulted in serious patient harm were shared with pharmacy and nursing staff, Medication Safety Committee members, and posted on the medication safety intranet site.
- After a year without a medication safety officer, the monthly meetings for the Medication Safety Committee, quarterly P&T medication event executive summary reviews and monthly medication safety reviews were reinitiated in 2021.

Pharmacy staff report

Medication Safety	
Pharmacists	1
Board-certified pharmacist	1

Looking at 2022

In 2022, the Medication Safety Committee plans to compare current practices at all Legacy Hospitals against six ISMP targeted medication safety best practice standards, then take steps to close any gaps that exist.

- If gap analysis reveals areas of non-compliance with the above best practices, steps will be taken to fully implement across the system.



Clinical Systems

The pharmacy clinical team is supported by inpatient clinical managers at each medical center. All six clinical managers were promoted from clinical coordinators to managers during the past year and now have human resources responsibilities.

Separately, we also hired two new clinical managers at Legacy Meridian Park Medical Center and Randall Children's Hospital at Legacy Emanuel.

Some of the accomplishments of this team include updating pharmacy protocols, reviewing and editing Epic order sets, providing pharmacist education on formulary and protocol changes and continuing implementation of standard clinical work for our pharmacists. The clinical managers have also been critical in identifying and implementing strategies for drug shortage mitigation.

Pharmacy at a system level has several clinical pharmacists who support the pharmacy enterprise providing formulary management support, project support, informatics support and infectious diseases support. The clinical coordinator for formulary management is a new position and is focused on initiatives to streamline the formulary and promote cost effectiveness of care.

This clinical team worked on a pro forma and was approved for increased staffing support to fully implement a pharmacy-owned medication reconciliation program and a meds-to-beds program. This team will support the rollout and implementation of these programs in fiscal year 2023.

We hired a new infectious disease (ID) clinical coordinator who provided support in staff education around COVID-19 vaccinations and new COVID-19 therapies. This pharmacist partnered with infectious disease physicians on a new urinary tract infection clinical guideline that will be available in Epic. Future plans include implementation of a monthly education program for staff around ID topics and exploring opportunities to expand pharmacy ID into the ambulatory setting. The former ID pharmacist was promoted to a pharmacy director role. Prior to this transition, the former ID pharmacist specialist was integral in the establishment and

operations of the joint venture for mass vaccinations in Portland, the All4Oregon mass vaccination site, as well as outreach programs and education to ensure vaccination of underserved populations.



Left to right: Tiffany Wu, Pam White, Bob White



Left to right: Melanie Geer, Emily Shephard

Pharmacy Operations and Systems Team

The pharmacy systems team, also known as POST, employs three pharmacists and eight pharmacy technicians.

The POST team provides centralized support and oversight for:

- Charge integrity, data analytics and reporting.
- EHR medication order build.
- Automated dispensing system and infusion pump formulary maintenance.
- Pharmaceutical purchasing.
- The 340B program.

In the past year, this team has systematically transitioned the technical tools used to perform work from manual error prone processes to more automated cloud-based solutions. For example, cost update, invoicing and auditing workflows have transitioned from paper and PDF format (MS Access) to PowerApps-based processes that have made work more efficient. At the same time, these new processes have created a more reliable underlying data structure for storing and retrieving pharmacy data.

Some of the accomplishments of this team over the past year include preparation for, and then passing, the Health Resources and Services Administration (HRSA) audit of the Legacy Good Samaritan Medical Center 340B program with no findings. The POST team made 340B changes that

have resulted in increased savings in both mixed-use and retail settings. The team has also created a pharmacy dashboard app that houses useful reports to support drug utilization evaluation, drug spend monitoring and medication reconciliation tracking.

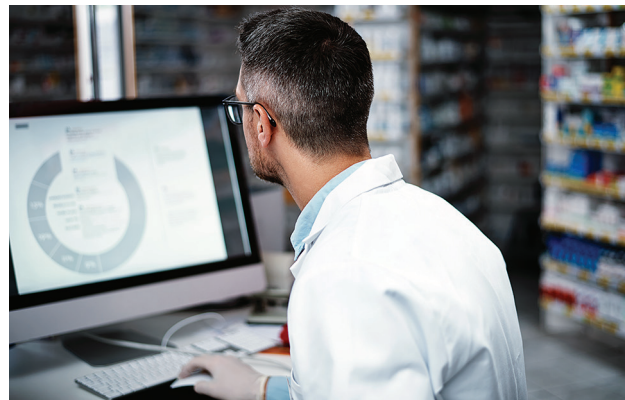
Looking at 2022

In 2022, the POST team plans to focus on optimizing the 340B program to increase savings that can be used to support Legacy sponsored charity care programs.

The team will be building and releasing new operational and clinical workload reports to help pharmacy leadership monitor and make decisions about how best to utilize pharmacy resources.

The team will continue to update medication build in the EHR to improve the efficiency and accuracy of ordering and dispensing. These projects include updating medication ordering lists and supporting implementation of the standardized use of bar code scanning and image capture as part of medication preparation and dispensing workflows.

The team is also partnering with Rev Cycle to minimize payor denials and write-offs to ensure better financial health for the system.



Pharmacy Residency Programs

Legacy Pharmacy Services has three postgraduate residency programs that are accredited by the American Society of Health System Pharmacists.

The postgraduate year 1 (PGY1) program has been in existence since 2001 and has graduated more than 50 residents from the program. Many of these PGY1 graduates have continued as Legacy pharmacy employees upon graduation and are working in a variety of settings across the Legacy Health system, including critical care, emergency services, general medicine, pediatrics and ambulatory care. This PGY1 program is a multi-site program with six residents employed by each of our medical centers.

In the past year, our residents have contributed to our COVID-19 mass vaccination clinics at the site level and at the All4Oregon mass vaccination site at the Oregon Convention Center, as well as staffing at our individual medical centers in the pharmacy department. Our PGY1 residents also presented posters virtually at the American Society of Health System Pharmacists Midyear Clinical Meeting.

Legacy also has a postgraduate year 2 (PGY2) program in infectious diseases. This program has been in existence since 2018, was accredited in 2019 and employs one resident each year. Residents train with our infectious diseases, microbiology and antimicrobial stewardship teams. Graduates hold positions as clinical specialists at both academic medical centers and large community hospital health systems. Research projects are regularly presented at IDWeek and often proceed to publication in peer-reviewed journals.

Finally, Legacy has a PGY2 program in ambulatory care. This program employs two residents who specialize in ambulatory care and rotate through our many LMG internal medicine and specialty clinics. This program has been in existence since 2017, was accredited in 2018 and has graduated eight residents. Three of these graduates have been hired into pharmacist roles within Legacy, including



Back row, left to right: Michelle Murray, Jordan Kram, Nicole Hill, Trang Duc, Jessi Shelton. Front row: Tiffani Wu, Alice La.



Left to right, Jessica Goldsworthy and Jackie Harris, PGY2 ambulatory care

ambulatory care and transitions of care. Past residents have placed nationally in American College of Clinical Pharmacy's Ambulatory Care Virtual Poster Symposium, and a past residency project was recently published in the Journal of the American College of Clinical Pharmacy.

There are five PGY1 and three PGY2 residents from the 2020–21 residency year.

We have 55 graduates from our PGY1 program and 17 graduates from our PGY2 programs.

Currently, we have 28 former PGY1 and six PGY2 residents as employees across the Legacy Health system.

Looking at 2022

Our residency programs are preparing for the 2022–23 residency year and for an upcoming (and unscheduled) residency accreditation visit.

Celebrating Legacy Pharmacy's service to the community during COVID-19



Dom Chan, Director of Pharmacy, Legacy Emanuel Medical Center

©2020 THE OREGONIAN. ALL RIGHTS RESERVED. USED WITH PERMISSION.



Pharmacists Brock Parker and Bob White at the Holladay Park Vaccine Inventory Depot.

Legacy Pharmacy Services

legacyhealth.org/pharmacy

