I would like to start by thanking Jed Magen for his service as President this past year and for all he has done to advance our organization’s mission to have a larger impact in the field of psychiatry.

This is an exciting time to be in academic psychiatry. Increasing numbers of medical students are choosing a career in psychiatry, making it more competitive to obtain a residency position than at anytime during my tenure as a chair. This larger applicant pool is welcome at a time when we are seeing an increasing need for psychiatric services. The challenge for us in academic psychiatry is to be able to meet this need by training more psychiatrists. This will entail advocating for more residency slots and ensuring that our departments have the resources to well prepare their trainees.

The AACDP welcomes your involvement in our organization, which was created to help chairs provide academic based clinical care, research and education. The collegial meetings provide an opportunity to network with other chairs, share information, and develop leadership skills.

The fall meeting was in Boston on September 6th and 7th. Jeffrey Geller, President Elect of the American Psychiatric Association, addressed the group and answered questions. Gary Cottlieb presented “The Current State of Health Care and Impact on Behavioral Health”. There also was an interactive panel discussion on “The Relationship Between Chair and Dean”. The committees on Education, Research, Advocacy, Clinical Enterprise and Programs met as well as the Executive Committee. Greg Dalack presented a lecture as the recipient of the Leadership Award.

Your involvement in AACDP is welcome and encouraged. If you would like to join or wish further information about current committee openings please contact Frances Bell, our Executive Director.

The spring meeting is in Philadelphia in April during the American Psychiatric Association 173rd Annual Meeting. The fall meeting will be at the APA Headquarters in Washington, DC on September 18th with an advocacy day on the Capitol Hill taking place the day before on September 17th arranged for us by the APA staff. Thank you for this opportunity to work with you during the coming year.

Timothy J. Soundy MD
AACDP Leadership Award

Gregory Dalack, MD

Gregory Dalack, Chair of Psychiatry at University of Michigan and past president of AACDP was this year’s selection for the AACDP Leadership Award. Here is a summary of his presentation “Reflections on Leadership”, delivered at the AACDP meeting on September 6, 2019:

Dr. Dalack conveyed his deep gratitude to colleagues and the association for this recognition.

He then focused on personal reflections about his own journey to leadership opportunities, starting at the Ann Arbor VA as Mental Health Clinic chief, then as chief of the MH Service. He emphasized both the importance of taking risks in new leadership roles (“the timing is rarely perfect”), working with good teams, and sometimes leading from the middle- knowing when to let others bring forward good ideas and drive initiatives forward. He reflected on the twists and turns in his path that occurred when he tried to take advantage of transition opportunities. One particular transition opportunity came when the role of Associate Chair for Education was offered to him. This was a bit of a leap beyond his passion as an educator to learn more about education administration while advancing his own pedagogy. He commented that it was in this transition that he started to attend Association of Academic Psychiatry (AAP) meetings, and took the Master Educator sequence that AAP offers.

The next opportunity was to take on the department’s Vice Chair role a year later. Shortly after taking that role, his chair decided to step down and the opportunity to become interim chair presented. Excited trepidation led him to rise to this challenge, but not identify himself as a candidate for the permanent chair role until he had been interim for a year and “understood better not only what I knew, but what I did not know” about the chair role – emphasizing that it is important to take reasonable risks. He was selected as chair in 2010.

He commented on the stresses of leadership roles like ours: you are typically the recipient of complaints and disgruntlement, and much more rarely the recipient of faculty and staff acknowledgement and gratitude (“few folks say to their chair, I am happy and have everything I need…”). Obviously, we do better when our ego is not at stake. He conveyed his own sense of trying to “be like a duck” and let those comments “roll off your back like water” rather than taking them personally, working hard to solve problems because it is the right thing to do, not because you will be remembered for it.

Finally, he encouraged those assembled to “Challenge yourself to do new things.” For him, in recent years, this included learning about Collaborative Care and becoming a psychiatric consultant to two clinics. More recently, he challenged himself to compete in a “mini-sprint” triathlon with family members.

He expressed profound gratitude for the support and collegial relationships that the AACDP has afforded him, and hoped he can continue to give to others in return for all that the association has given to him. Finally, he gave special thanks to his wife Amal for her support of him and his family throughout the journey.

He ended by saying: “the leadership road can be one you blaze, but also one where you occasionally follow the good advice

Continued on Pg. 3
of others. It is important not to have your identity totally locked up in any one role or set of activities. Continually challenge yourself in some way and remember to have fun with colleagues, trainees, family, friends!"

“I am deeply appreciative of your support and this very humbling and wonderful recognition. Thank you!”

Gary Gottlieb, MD

Dr. Gottlieb provided an excellent presentation on current and future issues for Chairs of Psychiatry leading behavioral health services.

The Critical Role of Psychiatry and all of Behavioral Health in the Evolving Health Care Marketplace

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**Triple Aim**

- Improved Access
- Improved Quality
- Reduced Total Medical Expenses


Continued on Pg. 4
Triple Aim

- Improved Access
- Improved Quality
- Reduced Total Medical Expenses

Value as the Critical Outcome

Outcomes
- Defined by patient
- Measured for patient's condition over entire episode of care

Cost
- Measured for patient's condition over entire episode of care

Key Focuses:
1. Outcomes
2. Costs over episodes
3. Improvement
4. Teamwork

Value for Patients = Health Outcomes
Cost of delivering outcomes

Current Market Environment

Payment reform, Rate regulation, Patients as consumers

- Tiered, limited networks

Risk Shift to Providers

- Global payments
- Shared savings
- ACO/Population management
- Bundled payments
- Episodic management

Changing Marketplace

- Focus on PCPs
- Reduced hospital use and other expensive resources

Continued on Pg. 5
Key Tools to Adapt to Clinical Care to New Payment Models

- Care Redesign
  - Population Risk
    - Primary Care/Front End
      - Patient Centered Medical Homes
  - Bundled Payments
    - Specialty/Referral Care
      - Transcations/Visits \(\rightarrow\) Episodes

Strategic Building Blocks

- Care Redesign
- Primary Care Strategy/Medical Home
- Mental Health and Substance Use Care
- Coordination of Care
- IT

Prevalence of Behavioral Disorders in Primary Care

- Employment based insured: 20-25%
- Uninsured and Medicaid: 50%
- Medicare: 30-35%

Katon W, Shader R. Consultation psychiatry in the medical home and accountable care organizations: achieving the triple aim. General Hospital Psychiatry. 2011;33:305-110
Cost Implication Examples

- Primary care patients with Anxiety and/or Depression:
  - Present with physical complaints ~70% of the time
    - Potential delay in diagnosis and treatment
  - Two-threefold more physical symptoms
  - Twofold greater costs

Chronic Conditions

- Affect 133 million Americans

- Total direct medical costs $1.5-2.0T
  - 75% of US health spending
  - 70% of all deaths

Every day for next 20 years - 10,000 Baby Boomers reach age 65
The number of people with Chronic Conditions will increase by 37% between 2000 and 2030

IOM “Exemplar Chronic Conditions”

- Arthritis (50M)
- Cancer Survivorship (12M)
- Chronic Pain (116M)
- Dementia (5.4M)
- Depression (20M)
- Type 2 Diabetes (25.6M)
- Post Traumatic Disability
- Schizophrenia (2M)
- Hearing and Vision loss (34M and 25M)

Successful Population Health Management for the Sickest Patients

CMS MGH Demonstration Project

Review of CMS demo panel (LMR and diagnostic codes) to identify indicators of psychiatric issues:

- 92% of enrolled patients had at least one indicator currently or in past.
- Patients with active and current diagnosis included:
  - 57% psychiatric diagnosis
  - 26% substance abuse diagnosis
  - 34% affective disorder
  - 30% neuropsych disorder, mostly dementia
- MGH ED (all admits) – 50% of patients with more than 12 ED visits a year had psych and/or substance abuse diagnosis

Continued on Pg. 8
### “Mental Health Patient Centered Medical Home”

- People with Serious Mental Disorders
  - Defined clinically and by utilization history and risk
- Assigned to primary MH clinician to captain
  - Intensive coordination, communication and care management
- Single care plan
- Assurance of continuity
- Non psychiatric providers (including primary care)
  - Integrated consultants

*Ehlers V. “Mental Health Home” proposed to boost care for psychiatric illnesses. Jounalwatch.com posted 4/23/20. Obtained online*

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### Critical Partnerships with Community Mental Health

- Primary source of care for people with serious mental illness
- Decades of modeling care management paradigms
- Blend of payment sources
  - Local, State, Grants, Insurance
- Availability of broad spectrum of proven treatment modalities not feasible in acute or health system settings
  - e.g. Assertive Community Treatment
    - Full spectrum of care, e.g. IOP, Partial, Clubhouse, etc.
- Critical to creating full spectrum of talent pipeline
- Essential to research agenda

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### Sample Psychiatric Bundles

- **Major Depressive Disorder** - single episode
  - By severity, morbidity, comorbidities
- **Schizophrenia**
  - With acute exacerbation
  - Management for a duration (e.g. one year) without exacerbation
- **GAD with Panic**
  - Management over a discrete time period
- **Opiate Addiction**
  - Acute management bundle
  - Harm reduction over time period

*Continued on Pg. 9*
Key Roles for Psychiatry

- Direct Care
- Population Behavioral Health Monitoring
  - Treatments, Outcomes, Costs
- Supervision of Interdisciplinary Teams
  - Psychiatric Medical Homes and Bundles
- Ensuring Triple Integration
  - Primary care, Mental Health, Substance Use

Workforce Remedies

- **Immediate**
  - PCMH/team based care
  - Supervised task shifting with intensive review for quality and outcomes
  - Individual and group programs including and driven by people with lived experience and the recovery community
  - Digital platforms
  - Telemedicine

- **Long term**
  - Increased training slots
  - Interdisciplinary training paradigms
  - State funded incentive programs
    - Debt repayment
    - Payment subsidies for high need specialties
  - Aggressive outreach to medical students
  - Embracing and attracting URM students
21st Century Cures Act-Mental Health and Substance Use

- Support of integrated care models so that mental health professionals can work more closely with primary care doctors.
  - Eliminate the Medicaid “same day” exclusion, which prohibits separate payment for mental health and primary care services
- Requiring the Department of Health and Human Services to develop a plan to ensure enforcement of federal parity laws that mandate that insurers cover mental illness the same as any other ailment.
- Providing $1 billion in state grants to address the opioid epidemic.
- $4.8 billion outside of budget caps for National Institutes of Health for fiscal years 2017-2026 including $1.56B for BRAIN initiative
- Expansion and reauthorization of grants for MH/SA training programs

Urgency to Lead In Science

- Fundamental, Basic and Translational Science
- Precision Medicine
- Data Development and Uses
  - Clinical and Real World
    - Artificial intelligence
- Diagnostics and Therapeutics
  - Spectrum of Clinical Providers and Competencies
  - Digital Clinical Tools
  - Digital Therapeutics

Sample Vulnerabilities to AMCs

- Growth of uninsured and underinsured populations
- Severe downward pressure on prices
  - Commercialization of Medicare, Medicaid rate reduction
    - Block grants eliminate program requirements
  - Disappearance of IME, GME and DSH
  - HSAs
    - Increase in price transparency and opportunity for reference pricing

Continued on Pg. 11
Petros Levounis, MD Summary:
Not a Chair, Not a Dean: Leadership Careers for Academic Psychiatrists Outside Academia

Traditional leadership tracks for academic psychiatrists point in the direction of becoming residency training program director, chair of one’s department of psychiatry, or dean of the medical school. In this workshop, we will explore alternative leadership pathways that lead to equally, if not more, gratifying and meaningful careers. Government-appointed directors and elected officials, hospital senior managers, CEOs of medical professional organizations, research leaders in industry or National Institutes, advocacy champions, health-related innovators and entrepreneurs, forensic experts, artists, and media personalities are some examples of “thinking outside the box” possibilities for psychiatrists who have trained and excelled in academic environments.

Welcome New Members:
American Association of Medical Colleges Meeting in Phoenix, Arizona, Showcases Mental Health and Addiction Treatment

Adam Brenner, Julie Gentile, David Henderson, Israel Liberzon, Samantha Meltzer-Brody, Peggy Nopoulos, Edward Norris, James Patterson, Prameet Singh, Rihard Smith, Carol Timminga, John Wagner, and Sarah Wakefield
Committee Reports:

**Advocacy Committee**
The committee has had 2 meetings by phone conference on July 8th and Nov 4th. We have decided to pursue a Legislative day for AACDP with congressional representatives. Our initial focus is psychiatric work force, residency spots and mental health parity. We recognize that there are many other organizations able to advocate effectively on many other aspects of mental health. We plan to liaise with the APA advocacy committee to ensure that there is minimal duplication of effort.

We plan to work towards an initial presentation in Washington, DC in conjunction with the APA meeting in Philadelphia in April 2020. We will be working closely with Craig Obey, Director of Governmental Relations at the APA. We will then follow up with another presentation in Washington, DC along with our fall AACDP meeting in September 2020.

We plan to conference at least every 2 months to develop and refine this agenda.

We appreciate any input from other members of the AACDP.

Thanks

Thad

**Communications Committee**
Howard Liu was appointed to chair a new Communications Committee. The Committee will encourage Chairs and Departments of Psychiatry to develop professional Twitter accounts to share innovations, recognize achievements and share best practices. If you are interested in working on this committee, please contact Howard: hyliu@unmc.edu

**Program Committee**
The Program Committee reviewed the date for the 2020 Spring Meeting, Friday, April 24 in Philadelphia.

There will be a new meeting plan and schedule for the Fall 2020 Meeting. We will be meeting at the APA Headquarters on Friday, September 18 for our program, with an Advocacy Day on Thursday, September 17. The APA Staff is working with us to set up the Advocacy Day so advance plans will be need to be made for your attendance.

**Research Committee**
The consensus of the research group was that we thought that we should generate a survey that would be a review of the state of the field combined with a needs assessment. The intent would be to use these data to create for Departments that did not have significant research infrastructure a mechanism for partnering with institutions that had more sophisticated research programs in order to help initiate a greater breadth of research throughout the AACDP membership.

We look forward to your comments and feedback!
Rapid prototyping of a service to treat comorbid sepsis and intravenous drug use

Lessons from an evolving initiative of Carilion Clinic

William S Rea MD

E: wsrea@carilionclinic.org | P: 540-588-4008
Address: 2017 Jefferson Street SW Roanoke VA 24014

Continued on Pg. 14
GUMMIFORM SEPSIS AND TVDO

Description

This is a narrative description of some of the challenges and successes of a new program of extreme intravenous drug dependence in a group of people medically ill with septic complications. The complications included septic endocarditis, osteomyelitis, discitis, septic emboli, and lesions.
Background

During the years from 2005 to 2015, the number of deaths in Virginia by prescription opioid overdose rose from about 1 per 100,000 people, to 5 per 100,000. This was the first wave of the “opioid epidemic.” (Fig 1) This wave was driven by prescription medications.

The second wave, from 2010 to 2015, was of heroin-related overdose deaths, with a similar rise from 0.5 to 4.5 deaths per 100,000 people but in five years—half the time of the previous wave (Fig 1).

The third wave, beginning in 2014, was of synthetic opioid overdose death, rising in two years from 0.5 per 100,000 to 9.5 per 100,000 (Fig 1).

However, measurement of deaths by overdose does not completely capture the effects of the opioid epidemic. Death and morbidity also occur for reasons other than overdose. Use of opioids intravenously result in cardiovascular\(^1\), respiratory\(^2\), and infectious complications\(^3\).

In the ten years from 2007 and 2017 in North Carolina, hospitalizations for infective endocarditis due to intravenous drug use increased from 0.92 to 10.95 per 100,000, a twelve-fold increase\(^4\). This increase in hospitalizations was seen nationwide and certainly in Virginia. (Fig 2) The five-year survival rate of intravenous drug users with endocarditis who have had valve replacement is only 46.7\(^%\)^5.

Recognizing the grave health implications of the opioid epidemic, Nancy Agee, CEO of Carilion Clinic, established an Opioid Task Force (OTF) in the fall of 2017. Under the direction of Robert Trestman PhD MD, Chair of Psychiatry and Behavioral Medicine, and Gary Scott, Vice President of Surgery, the OTF strove to reduce the public health impact of the opioid problem on our patients and communities. Dr Trestman and Mr Scott, appointed William Rea MD, Director of Addiction Services for the Department of Psychiatry, to head the Community-Based Addictions committee. Along with other initiatives this committee supported a new approach to sepsis in intravenous drug users.


\(^3\)Colville T, Sharma V, Albouaini K. Infective endocarditis in intravenous drug users: a review article. Postgraduate Medical Journal, 2016;92:105-111
Stakeholders

The group of people working on the project and the rationale for their inclusion is:

**Susan Lee DO** (Section Chief, Hospitalists, Internal Medicine). Boarded in both Internal Medicine and Psychiatry, Dr Lee is familiar with both workflow issues and both major problems affecting these patients.

**William Rea MD** (Director, Addiction Division, Psychiatry). Boarded in Psychiatry and Addiction Medicine, Dr Rea was positioned to help bring substance use disorder treatment on a non-psychiatric unit.

**Thomas Kerker MD** (Section Chief, Infectious Disease, Internal Medicine). Boarded in Internal Medicine and Infectious Disease, Dr Kerker knew the core issue determining length of stay.

**Deirdre Rea DNP(c) MSN PMH-CNS RN-BC** (Director, Connect). Familiar with both medical and psychiatric systems of care as well as ASAM triage and treatment. Ms Rea helped design the system, especially the therapy components as well as providing and supervising the therapist.

**Tammy Mitchell MSN RN** (Unit Director, SW). Ms Mitchell led the effort to transform the nursing staff.

**Catherine Detweiler Lane LCSW** (Connect, therapist). Ms Lane created and ran the therapy groups.

**Erin Casey BS** (Director, Peer Recovery Specialists). The inclusion of peer recovery specialists in the treatment team proved a major asset in both patient retention and in transition to outpatient care.

**Lisa Simpson FNP-C RN** (Pain Medicine). Ms Simpson worked closely with the team to offer objective standards for analgesia and guidance in tapering opioids after surgery.
Initial approach

Dr Rea and Susan Lee DO, Chief of the Hospitalist Section for Internal Medicine, identified key stakeholders and initial problems associated with the treatment of endocarditis from intravenous drug use (IVDU). The Chairs of Internal Medicine, Paul Skolnik MD, and Psychiatry, Robert Trestman PhD MD, gave their full support to the initiative. We first identified the typical patient throughput for patients with infective endocarditis. We quickly realized that the patient path was very similar for osteomyelitis from IVDU except for the type of surgery done, and similar for those not requiring surgical intervention.
Comorbid sepsis and IVDU

Challenges

Prior to starting the program the number of patients hospitalized from septic complications of intravenous drug use was steadily growing. These patients were optimally treated with up to six weeks of intravenous antibiotic therapy. For the first week or two of the hospital admission, the patients were on acute surgical or medical units—often intensive care units. Thereafter they were moved to a subacute unit: 5 West.

5 West was a traditionally designed, 26 bed medical unit in the older part of the hospital. All rooms were private. Prior to this initiative the numbers of patients with sepsis and intravenous drug use were increasing and the nursing staff was having difficulty. The patients were variously described as “disruptive,” “rude,” “hostile,” “manipulative,” and difficult to deal with. Nursing morale had suffered and turnover had increased.

We had initially hoped that, by initiating substance use disorder treatment while in the early stages of the hospitalization we could engage the sepsis/IVDU patients and stabilize them sufficiently that antibiotic treatment could be continued as an outpatient, via a peripherally inserted central catheter (PICC) line. At the same time they would engage in outpatient treatment for drug use. In so doing we had hoped that we would diminish the healthcare burden carried by these comorbid disorders and improve patient throughput. We also had hoped that we could motivate the patients to continue treatment for their substance use disorder after discharge from inpatient.

The new program was to be called “The Pathways Program.”

The first stage was development of the treatment team. The internal medicine hospitalist remained the attending of record with the addiction psychiatrist consulting. A master’s level therapist delivered groups three times a week and individual therapy weekly. Family therapy occurred when family was available. Weekly team meetings with all involved staff were designated. Peer recovery specialists were assigned to each patient.

With the assignment of dedicated resources from psychiatry, nursing morale on the medical unit began to improve. Staff began to coalesce around a newfound sense of competence. Initially there was some mild role confusion but it sorted itself out into the roles on the next two pages.
Roles of differing disciplines in the Pathways Program

**Internal medicine hospitalist**

The hospitalist retained the role of attending physician. He or she handled general medical care, integrating input from consultants and other staff. For example, if infectious disease determined intravenous antibiotics were no longer necessary the hospitalist ensured the patient was medically stable at the time of discharge.

**Addiction psychiatrist**

The addiction psychiatrist was responsible for assessing the pattern and progression of substance use disorder in the patient’s life, determining appropriate ASAM level of care, and whether medication assisted treatment was appropriate and feasible.

**Nursing**

Nursing’s role was most complex, treating the opioid or methamphetamine use disorder patients on a medical unit. Nursing assured delivery of effective care and had the most interactions with the patients. As a result, nursing behavior and skills were critical to the success of the team.
Comorbid sepsis and IVDU

Therapist
The master's level social worker was assigned half-time to the unit. She was responsible for developing, with the aid of her supervisor, an effective series of groups and individual therapy. The prior experience and expertise of the therapist in helping individuals with substance use disorder was central.

Peer recovery specialist
Peer recovery specialists were relatively new to the Carilion Clinic system and rapidly developed several key functions, including engagement of the patient on coming to the unit and assisting with a warm hand-off to outpatient treatment at the time of discharge.

Consultants
The team's interaction with consultants was very important. Infectious disease input often determined length of stay for antibiotics. Pain management helped avoid premature cessation of opioid agonists and initiation of partial agonist.

Continued on Pg. 21
Initial Actions

- Develop a behavioral change program on a medical unit
- Develop staff skills in the care of patients with substance use disorders
- Develop mechanisms to acculturate patients
- Develop resources to handle the patients’ treatment after discharge
- Begin to track results

The nursing staff and hospitalists quickly made the therapist, addiction psychiatrist, and peer recovery specialists feel welcome. Nursing staff under Ms Mitchell sought instruction in the skills needed to deal with this patient population. As a result Dr Rea and she scheduled a weekly educational conference, open to clinical staff from anywhere in the hospital. The choice of topic was dictated by clinical problems that arose that week. For example, discussion of Stages of Change was triggered by a patient who did not recognize any need to stop drugs. The session resulted in nursing developing increasing confidence in dealing with the patients.

The groups run by the social work therapist began to mobilize patient support for each others’ change. The peer recovery specialists nurtured these changes and they and the nursing staff became more adept in welcoming patients to the unit.

Dr Rea liaised with the psychiatry department’s office-based opioid treatment (OBOT) program, assuring an intake appointment within 3 business days of discharge from the medical unit. The OBOT guaranteed availability of medication-assisted treatment for up 50 patients from the Pathways Program.
Initial Situation Overview

Subacute medical treatment and drug treatment are a difficult mix

- It is difficult to manage a behavioral change program as a minority on a medical unit.
- Not every nurse was equally responsive to the changes and population.
- All disciplines needed to be open to listening to and learning from each other.
- Boundaries are essential.
- Who is in charge of the patient’s care (rotating hospitalists).

In the initial three months the problems of establishing a behavioral change program on a medical/surgical unit became apparent. For example, milieu therapy was considered desirable but there was no room set aside for the Pathways patients to congregate. The program could not have patients of different genders visiting each others rooms. It was disruptive to other medical patients for the sepsis/IVDU patients to be chatting in the halls at 10:30 at night.

Some nurses showed less interest in working with the substance use population and were assigned more to the medical/surgical patients on the unit.

Those who continue to work with the Pathways patients developed skills more rapidly with increased exposure. The program set patient milestones linked to a simplified privilege system. Among other privileges, a more advanced patient could go outside with a peer recovery specialist. However, those privileges needed to be modified as risk management pointed out the liability of patients with serious medical problems going off the unit; the program modified it so the privilege can be only by doctor’s or ACP’s order.

An ongoing conflict arose around visitation. The medical/surgical patients sometimes have family stay all night. For some of our homeless patients, their rooms became temporary shelters for other homeless individuals until we amended the rules.

A related issue was search of visitors—a normal procedure on psychiatric units but unusual on medical units. As each of these issues arose, the team met to adapt protocols to meet the intent of the rules (to encourage recovery).

A patient who dies of complications of sepsis/IVDU is rarely elderly. The death of a young person is a powerful blow to staff and other patients of the Pathways Program.
Preliminary results of the Pathways Program

Staff retention

- Retention rate improved to 100% in FY2019 (69.9% FY2018)
- Turnover rate dropped to 4.7% in FY2019 (31.7% FY2018)
- Vacancy rate dropped to 4.1% in FY2019 (13.7% FY2018)

Patient demographics

- 54 patients have been treated in the past fourteen months. (An additional 8 are still hospitalized.)
- Percent male: 45.3%
- Average age: 36.8 years
- Average length of stay: 25.8 days
- Geographic spread: furthest east--Richmond, south--Virginia/ North Carolina line, west--extreme SW Virginia, north--central Pennsylvania

Continued on Pg. 24
Comorbid sepsis and IVDU

3

Septic complications

Many patients had multiple complications of sepsis: for example, septic embolic and endocarditis. Note that these percentages change with each patient treated.

- Endocarditis: 35.3%
- Osteomyelitis: 19.5%
- Septic emboli: 31.4%
- Septic abscesses: 3.7%

4

Disposition at discharge

We tracked data on where the patient was referred. On our internally referred patients we could track their follow-up with their permission. Doing so with externally referred patients was not feasible.

- Deceased during hospitalization or immediately after discharge: 3/54 (5.5%)
- Referred to Carilion Clinic OBOT: 33/54 (61.1%)
- Successful handoff to Carilion Clinic OBOT: 31/33 (93.9%)
- Subsequent incarceration 3/54 (5.5%)
- Referral to MAT outside our area: 15/54 (27.8%)
- Left AMA: 5/54 (9.3%)
New Situation Challenges

Opportunities

- The Pathways Program was designed for 3-5 patients on one unit; it now averages 6-8 with 1-4 waiting
- Incorporation of residents and trainees, while welcome, leads to occasional inconsistency
- Rotation of hospitalists every week affects continuity of care
- Helping staff to not take too much responsibility for patient successes or failures
- Do all of the above with increasingly ill patients

Although there have been several readmissions of patients, until July 2019, these were all readmissions of people who had left against medical advice and were readmitted when they realized they wanted treatment. No one signed out AMA more than once. In July, a patient was readmitted after reinfection.

This readmission prompted the staff to look at anything that could have changed the outcome after the first hospital stay. They determined that greater attention to family systems was needed. As a result, social work, peer recovery, and the psychiatrist all continued to intervene with him and his family when his care was upgraded to a progressive care unit. The family and the patient are now resolved that he go to a residential drug program upon discharge from our facility.

The pattern of illness of the patients has changed gradually over this first year, with increasing prevalence of methamphetamine as a significant factor, with or without opioid use. Although medication assisted treatment is available for opioid use disorder, no such option is practical for abuse of stimulants. In addition, use of intravenous methamphetamine is associated with a much more difficult illness to treat.

Continued on Pg. 26
1 **Staff development**

Do not underestimate the importance of time spent ensuring the staff attain the needed skills. Those working in psychiatry may take for granted the basic skills of interaction, de-escalation, and development of rapport that are expected for all staff working on psychiatric inpatient units. Although those skills were present to varying degrees with the staff on S West, they were not consistent. Use of a trained medical educator weekly improved these skills.

Another challenge was to establish consistency and trust among the various team members. Some staff members were not comfortable with patients who were challenging in the way severe substance use disorder patients may be. In retrospect, it is better to allow these staff members to self-select and gradually have less contact with the sepsis/IVDU patients. Consistency among staff and being able to support each other’s decisions unequivocally is very important.

Equally important is the development in the psychiatric staff to deal with the frequent and abrupt changes in health status among these patients. The appearance of a new site of infection or complication despite antibiotic treatment sometimes meant upgrade in the patients medical condition and transfer to a more acute unit. Treatment and contact for the substance use disorder could not simply pause when that happened. Lack of contact was perceived by the patient as abandonment.

2 **Boundaries**

Issues about boundaries, both physical and procedural, arose almost weekly. In the physical area, six beds on a 26 bed unit were designated for this program. As patients were discharged and other patients were admitted, there was no guarantee that the patients would be in any proximity to each other. The unit was open to both elevators and to stairwells. Because of this it was difficult to guard against contraband being brought to the unit and to guide or monitor visitation. A dedicated unit with key card access permits better boundary control physically.

A separate issue is control of boundaries procedurally. All hospital patients who suffered from concurrent sepsis and intravenous drug use were directed toward this unit. Sometimes they had no wish to participate in the Pathways Program but still expected the privileges associated with it. To further complicate matters, contact with program personnel sometimes lead to them deciding to join and participate after a time on the unit.
Lessons learned

3 Staff composition and structure

Attempting to establish this program with a minimum number of embedded psychiatric personnel was difficult. Ideally there would be a balanced mix of medical/surgical nurses and psychiatric nurses and technicians. It is unusual to find nursing personnel with excellent skills in both areas. Seeding the unit with a few psychiatric nurses or technicians could have led to more rapid staff development.

Another issue was the structure of the rotations for the internal medicine hospitalist staff. Traditionally these physicians rotated onto the unit for one week and then off the unit for two weeks. At the same time these were the attending physicians with ultimate responsibility for the patient. This occasionally led to attending hospitalists not agreeing with a treatment plan established by the team a with the prior hospitalist. Over time the hospitalists became more comfortable relying on the team for behavioral decisions.

4 Incorporation of trainees

Initially the program did not incorporate trainees in an organized way. Over the first year of operation, the consultation liaison psychiatry team began to send first and second-year psychiatric residents and medical students to the unit to perform evaluations and care for these patients. Orientation to the program and close supervision by the psychiatric attending proved valuable. Trainees highly rated the exposure to this population and model of care. In the future we would like to formalize a separate training rotation on this program, incorporating our newly approved Addiction Medicine fellow beginning 2020.

Continued on Pg. 28
5 Flexible census

Initially the program was designed to accommodate 5 to 6 patients. The census on the program has ranged from 3 to 5 patients, with up to three patients elsewhere in the hospital waiting to be transferred to the Pathways Program for treatment. Staffing for such variability in census can be difficult, especially for nursing. However, over the past few months, census has been at least six patients continuously.

6 Regulatory and risk issues are important

It is important to achieve buy-in from risk management and compliance on all procedures and protocols. An example was search of patient belongings. On psychiatric units it is expected that patient belongings will be searched upon arrival at the unit for contraband and for dangerous items. The standard on our medical units is that we could not search patient belongings without the individual’s permission.

This resulted in one case in a standoff between a patient who did not want his belongings searched and staff who were concerned about contraband but also about the hospital rules regarding searches. After 24 hours the patient did agree to a search that revealed syringes, illicit drugs, and a razor. Were the unit designated a “psychiatric/medical” unit rather than a “medical/psychiatric” unit procedures may be different. Another issue arises about bed licensure as a psychiatric unit and billing. All these issues need the support of senior administration and medical staff.
Lessons learned

7 Aftercare and a warm handoff is essential

It is difficult for addicted individuals outside the hospital to get into medication assisted treatment. Barriers include lack of access due to finances, lack of available slots, and concerns of programs about accepting people immediately after a six week hospital stay. We were fortunate to have the full support of our OBOT with close coordination between our addiction psychiatrist and that program. The peer recovery specialists facilitated and encouraged the patients to go to their follow-up appointments with good success. Equally important was the early intervention of our Eligibility Assistance Program to help these patients get Medicaid.

Even with the support of our local OBOT, finding medication assisted treatment for patients who returned to homes far away or in remote rural areas was time-consuming and challenging.

8 Consistent support is key

Caring for a patient population with complex needs led to frequent questions that could be decided only at the highest levels of hospital leadership. The continued support of the Chairs of Psychiatry and Behavioral Health and of Internal Medicine as well as that of hospital administration were critical.
## Comorbid sepsis and IVDU

### Plans for the future

- Physically separate the Pathways Program to permit boundary control for patient safety (primarily to limit contraband)
- Formally make it part of a medical/psychiatric unit with increased presence of mental health and substance use treatment specialists
- Improve aftercare options for methamphetamine abuse and options for use of telehealth for aftercare
- Further explore options to treat patients on a non-medical unit
- Continue to collect data to improve the program
Carilion Clinic Results of IVDU and Sepsis Program

Patient demographics
- Patients discharged: 54
- Percent male: 45.3%
- Average age: 36.8 years
- Average length of stay: 25.8 days
- Geographic spread: furthest east—Richmond south—Virginia/ North Carolina line west—extreme SW Virginia north—central Pennsylvania

Disposition at discharge
- Deceased during hospitalization or immediately after discharge: 3/54 (5.5%)
- Referred to Carilion Clinic OBOT: 33/54 (61.1%)
- Successful handoff to Carilion Clinic OBOT: 31/33 (93.9%)
- Subsequent incarceration 3/54 (5.5%)
- Referral to MAT outside our area: 15/54 (27.8%)
- Left AMA: 5/54 (9.3%)

Septic complications
- Many patients had multiple complications of sepsis; for example, septic embolic and endocarditis. Note that these percentages change with each new patient treated.
- Endocarditis: 35.3%
- Osteomyelitis: 19.5%
- Septic emboli: 31.4%
- Septic abscesses: 3.7%

We tracked data on where the patient was referred. On our internally referred patients we could track their follow-up with their permission. Doing so with externally-referred patients was not feasible.

Nursing staff retention
- Nursing staff retention improved with the new Program. The current nurses express commitment in continuing in this role, with this population.
- Retention rate improved to 100% in FY2019 (69.9% FY2018)
- Turnover rate dropped to 4.7% in FY2019 (31.7% FY2018)
- Vacancy rate dropped to 4.1% in FY2019 (13.7% FY2018)

contact William Rea: wsrea@carilionclinic.org
Future Meetings:

April 24, 2020
Philadelphia, PA

September 17-18, 2020
Washington, DC

Executive Committee:

President, Timothy Soundy, MD
President Elect: Britta Ostermeyer, MD
Secretary-Treasuer: Jair Soares, MD
Immediate Past President: Jed Magen, DO