Team-based Proactive C-L Psychiatry

Integrated care meets inpatient C-L psychiatry

Mark Oldham, MD
Medical Director, PRIME Medicine
Assistant Professor of Psychiatry
University of Rochester Medical Center

H. Benjamin Lee, MD
John Romano, Professor and Chair
Department of Psychiatry
University of Rochester Medical Center

ACADEMY OF CONSULTATION-LIAISON PSYCHIATRY
Psychiatrists Providing Collaborative Care Bridging Physical and Mental Health

Disclosures

With respect to the following presentation, there has been no relevant (direct or indirect) financial relationship between the party listed above (and/or spouse/partner) and any for-profit company which could be considered a conflict of interest.

What is proactive C-L psychiatry?

An ***interdisciplinary model*** of C-L psychiatry that incorporates

- ***Systematic screening*** for mental health conditions,
- ***Early clinical intervention***, and
- ***Integration with primary teams***.

What are the goals of proactive C-L psychiatry?

- ***To facilitate efficient care*** and
- ***Improve outcomes***
- In a ***cost-effective manner***.

Unmet needs rethinking C-L psychiatry

Proactive C-L a modern approach

Daily operations the principles of proactive C-L in action

Future horizons C-L psychiatry for value-based care

The staggering cost of mental illness

- **Accounts for 1/3 of all years lived with disability**[1,2]
  - 5 of the top 20 causes of disability in high-income countries
  - Disproportionately affects working-aged adults
- **Contributes to leading causes of death**[3]
  - Heart disease, cancer, and cerebrovascular disease
  - Suicide itself is the 10th leading cause of death
- **Associated with 2x RR of all-cause mortality**[4]
  - Meta-analysis from 29 countries across 6 continents
- **Can shave a decade or more off life**[4,5]
  - Mental illness: 10 years of life lost
  - Substance use: 25 years of life lost
  - Dual diagnosis: 30 years of life lost

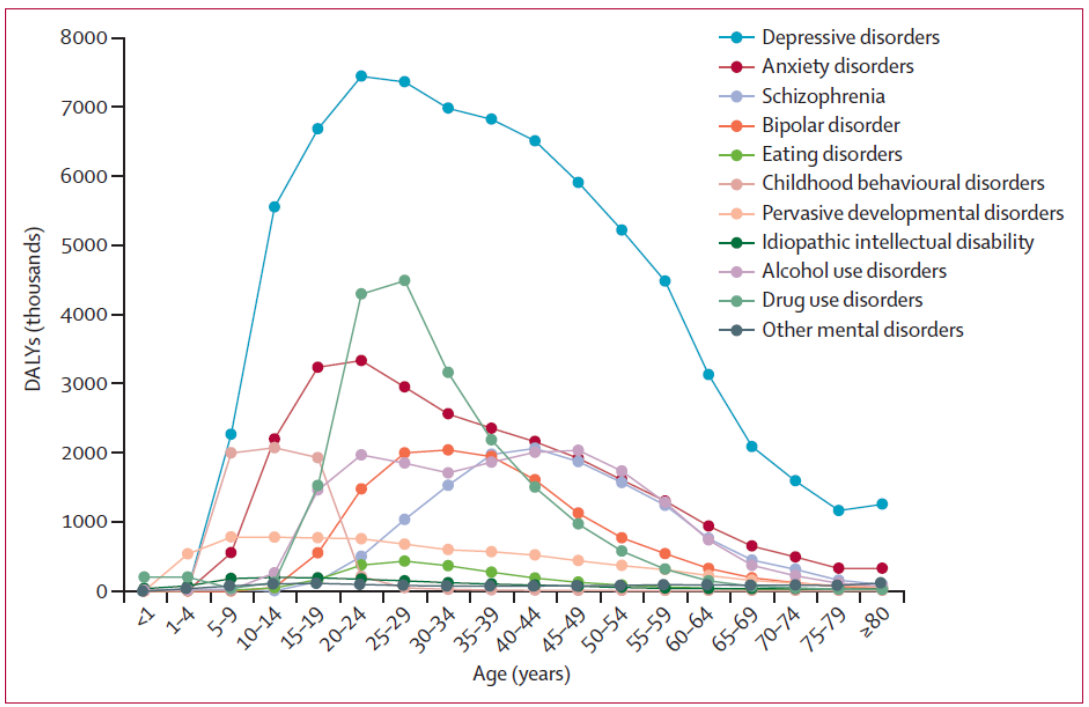


Figure 3: **Disability-adjusted life years (DALYs) for each mental and substance use disorder in 2010, by age**

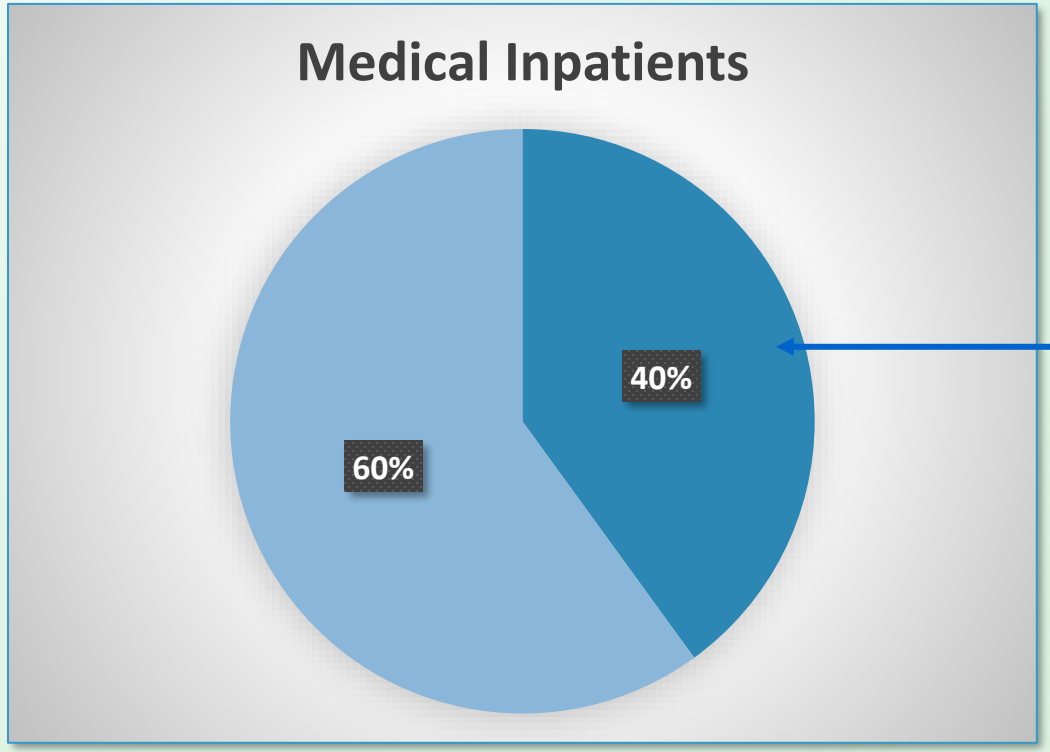
[1]Vigo *Lancet Psychiatry* 2016; [2]Whiteford *Lancet* 2013; [3]www.cdc.gov; [4]Walker *JAMA Psychiatry* 2015; [5]Oregon DHS 2008

The cost of mental illness in the general medical hospital[1-3]

- Hospital costs
  - Longer LOS: **UC, Davis Medical Center, annual cost est. $11M**[1]
  - Constant companion & restraint use
  - Poorer health outcomes/readmissions
  - Denied days due to delay in psychiatric disposition
- Staff costs
  - Lack of training, stigma and implicit bias
  - Dissatisfaction & distress
  - Spill-over effect to other patients
- Patient costs
  - Compromised quality of care
  - Mistrust may lead patients to avoid future medical care

[1]Bourgeois *Psychosom* 2005; [2]Desan *Psychsom* 2011; [3]Sledge *Psychoth Psychosom* 2015

Psychiatric comorbidity in medical inpatients



Psychiatric comorbidity[1,2]

- Lengthens hospitalizations
- Increases risk of re-hospitalization
- Increases healthcare costs
  - *Est $11M/yr at UC Davis*[3]

[1]Jansen *PLOS ONE* 2018; [2]Hansen 2001; [3]Bourgeois *Psychosomatics* 2005

Psychiatric conditions can compromise care in myriad ways

Condition	Selected maladaptive features
Delirium	Agitation, restlessness, confusion
Dementia	Forgetfulness, sundowning, care refusal
Personality change due to TBI	Emotional lability, impulsivity
Developmental disorder	Nonverbal, oppositional, defiant
Eating disorder	Hiding food, manipulating weigh-ins
Substance use disorder	Exaggerating CIWAs, contraband
Psychotic disorder	Paranoia, cheeking medications
Anxiety disorder	Refusing workup, overuse of call button
Mood disorders	Suicidal, disruptive mania
Personality disorder	Demanding, hostile, “splitting”
Munchausen syndrome	Self-injury, deception

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Early pilot study: Proactive psychiatric consultation

- A-B-A study embedding a psychiatrist in an internal medicine service
- Consult rates
  - A = 11%
  - B = 23%
- Findings
  - Half of patients with mental illness
  - **LOS reduced among intervention sample**
    (2.9 d vs 3.8 d)
  - **Lower proportion LOS ≥ 4 d**
    (15% vs 28%)
- Conclusion
  - High burden of prevalent psychiatric illness
  - Under-utilization of psychiatric services

Psychosomatics 2011:52:513–520

Original Research Reports

Proactive Psychiatric Consultation Services Reduce Length of Stay for Admissions to an Inpatient Medical Team

Paul H. Desan, M.D., Ph.D., Paula C. Zimbrean, M.D., Andrea J. Weinstein, M.A., Janis E. Bozzo, M.S.N., R.N., William H. Sledge, M.D.

Next step: A multi-disciplinary team approach

- Pre–post study on 3 medicine units (92 beds)
- Team members
  - Half-time psychiatrist
  - Nurse (clinical nurse specialist; later an APRN)
  - Social worker
- We found reduced lengths of stay
  - **Patients with psychiatric consult: 0.65 d**

    (7.3 vs. 6.7 d)
  - **Overall reduction: 0.29 d**

    (5.9d vs 5.6 d)

Regular Article

Psychotherapy and Psychosomatics

Psychother Psychosom 2015;84:208–216
DOI: 10.1159/000379757

Received: November 17, 2014
Accepted after revision: February 6, 2015
Published online: May 23, 2015

Multidisciplinary Proactive Psychiatric Consultation Service: Impact on Length of Stay for Medical Inpatients

William H. Sledge[a, b] Ralitza Gueorguieva[a, c] Paul Desan[a, b] Janis E. Bozzo[b]
Julianne Dorset[a] Hochang Benjamin Lee[a, b]

[a]Department of Psychiatry, Yale School of Medicine, [b]Yale New Haven Psychiatric Hospital, and [c]Department of Biostatistics, Yale School of Public Health, New Haven, Conn., USA

Cost-benefit analysis: Proactive vs traditional C-L psychiatry

Cost-benefit: *11 mos*, assuming *3.3% inflation*

1. **Average direct cost per case**
   - Includes room/board, labs, imaging, Rx, *etc*. (using Allscripts™)
   - $(\$6760[CL] - \$6550[BIT] = \$210\ per\ case)x(509\ BIT\ cases) = \mathbf{\$107k}$

2. **Backfill** (assuming 100% occupancy)
   - $\frac{(LOS\ reduction{=}0.65)x(509\ BIT\ cases)}{avg\ LOS = 5.8} = \mathbf{57\ additional\ patients}$
   - $(57\ patients)x(net\ revenue\ per\ case = \$12{,}700) = \mathbf{\$724k}$

Sledge et al. *Health Econ & Outcome Res* 2016.

Cost-benefit analysis: Proactive vs traditional C-L psychiatry

Gross savings:	$(per\ case\ value = \$107k) + (backfill\ = \$724k) = \mathbf{\$831k}$
Minus costs:	$-(nurse, SW, part\ time\ MD\ salary + benefits) = \mathbf{\$306k}$
Net gain:	$(net\ cost\ benefit) = \mathbf{\$525k}$
Annualized:	$\mathbf{\$572,000}$

Sledge et al. *Health Econ & Outcome Res* 2016.

Review article

A systematic review of proactive psychiatric consultation on hospital length of stay

Mark A. Oldham*, Khushminder Chahal, Hochang B. Lee

University of Rochester Medical Center, 300 Crittenden Blvd, Box PSYCH, Rochester, NY 14642, United States of America

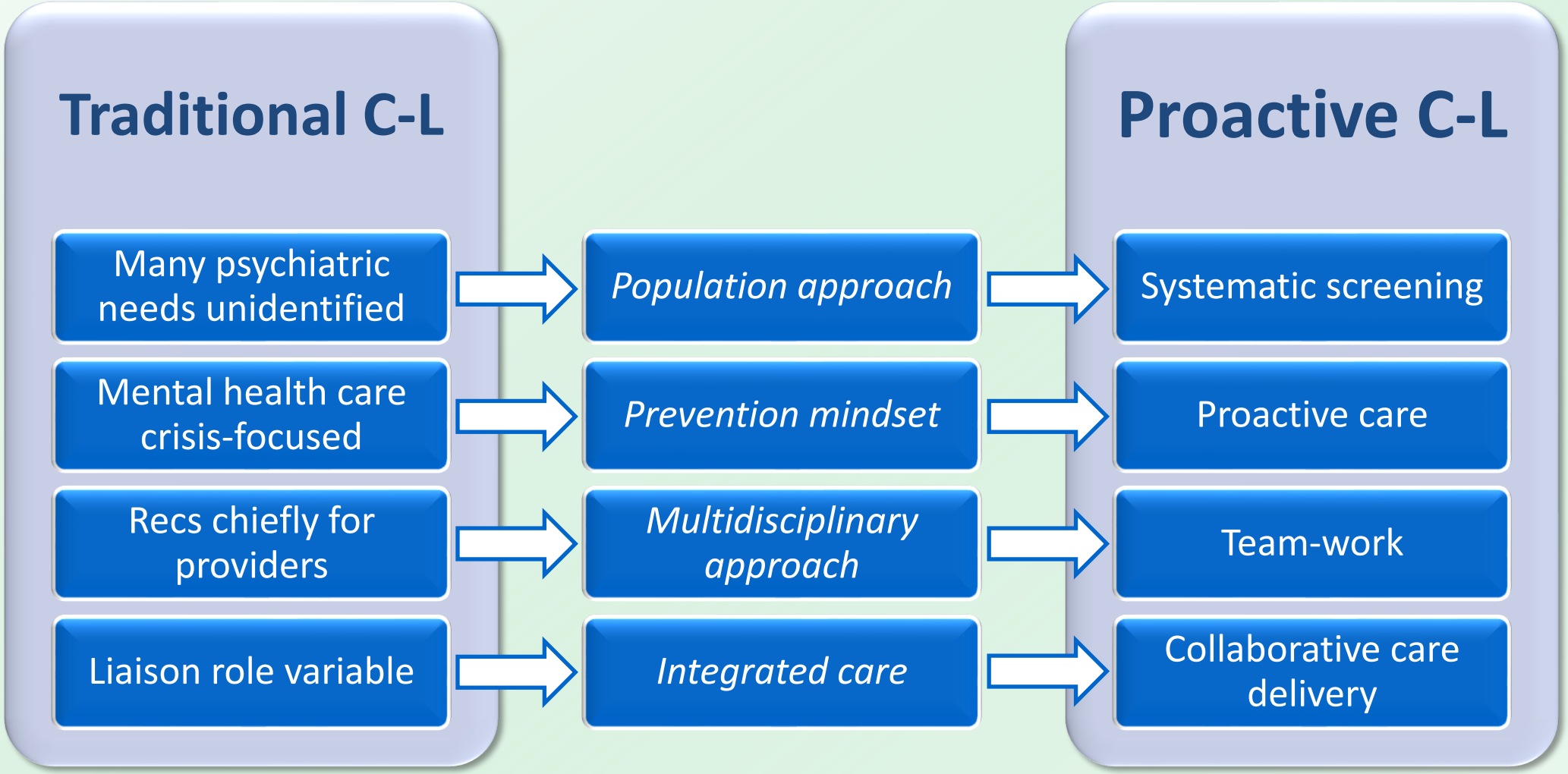
- Proactive models whose **screening was guided by clinical expertise in mental health care** and **care delivery was integrated with primary services** were associated with reduced LOS[1]
- Found "favorable returns on investment that more than offset the increased costs of providing this level of enhanced care."[1–3]

[1]Oldham *Gen Hosp Psychiatry* 2019; [2]Desan *Psychosom* 2011; [3]Sledge *Health Econ Out Res* 2016

Differences between traditional C-L and proactive C-L

Characteristic	Traditional C-L	Proactive C-L
Service delivery	Reactive (often to crises)	Proactive
Personnel	Single discipline	Multidisciplinary
Case identification	Primary team orders a consultation	Screening-driven Enriched by nursing interactions
Mode of intervention	Recommendations to primary team	Collaboration with patients treatment team (providers, nurses, social work)
Service goals	Treatment recommendation Risk reduction Crisis management	Preventing behavioral barriers to care Crisis prevention
Location	Across the hospital (typically)	Dedicated hospital units or services

The principles of proactive C-L



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1. Population approach: systematic screening

- **Goal**: to identify patients for whom early psychiatric intervention is likely to preempt crises, clinical deterioration, or compromised care.
- **Systematic**: reviewing every patient on certain hospital units or services
- **Standardized**: using a consistent, reproducible strategy
- **As early as feasible**: prompt screening to prevent a cascade of complications
- **Sliding threshold**: adaptable interventions based on patient volume
- **Step-wise**: may be done in one step (*e.g.*, positive/negative on chart review) or multi-step (*e.g.*, screening those positive on chart review with nursing/primary team)
- **Human vs machine**: can be by hand or automated (*e.g.*, a report that can be generated as needed), though electronic medical records often need to be optimized

2. Prevention mindset: Proactive care

- **Tailored degree of involvement**: interventions can be carried out by any number of proactive CL team members.
  - **Curbsides**: targeted recommendations w/o formal consultation often adequate
  - **Care/behavioral plans**: develop plans to address maladaptive interactions between patients and staff, care-compromising behaviors, or non-adherence
  - **Nurse interventions**: provide personalized recommendations for nurses to treat patients (*e.g.*, delirium precautions, poor sleep hygiene)
  - **Psychiatric disposition**: prompt facilitation of disposition if psychiatric needs are anticipated (*e.g.*, psychiatric admission, partial hospitalization)
  - **Aftercare planning**: ensuring adequate aftercare supports, community resources, and mental health referrals

3. Multidisciplinary approach: Teamwork

C-L psychiatrist

- Director/supervision
- Consultation
- Legal documents

Social worker

- Screening
- Community resources
- Aftercare/disposition

Nurse practitioner

- Coordinator/triage
- Consultation
- Screening

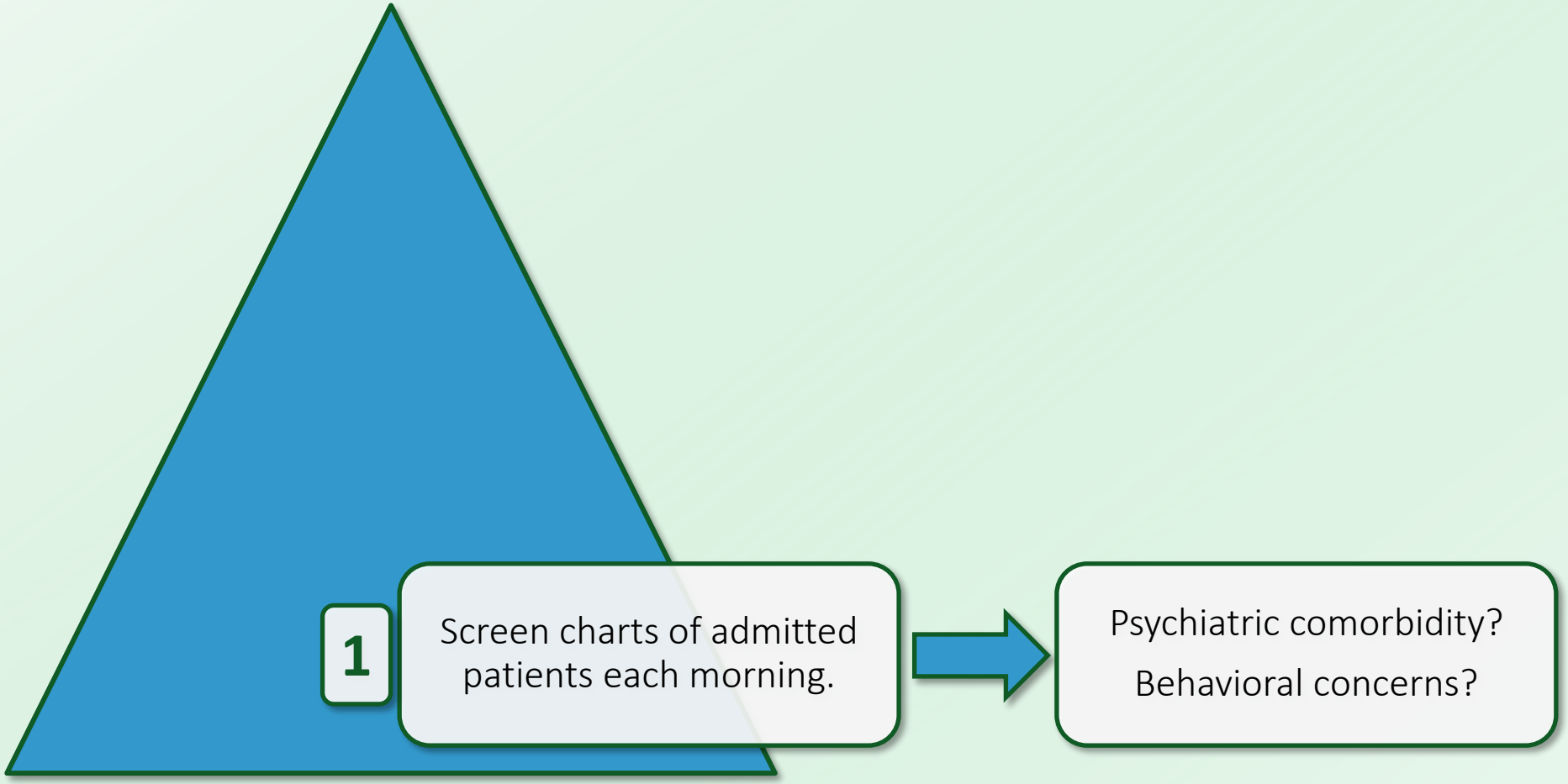
Potential team members

- Clinical nurse specialist
- RN coordinator
- Patient service manager
- Health psychologist
- Trainees

4. Integrated care: Collaborative care delivery

- **Corresponding expertise**: physician to physician; NP to NP/RN; SW to SW/care coordinator
- **Aligning workflow**: psychiatric care tailored to medicine & nursing workflow on dedicated units/services
- **Flexible intensity**: not all patients
- **Real-time communication**: the effect of which supports efficiency and develops healthy relationships, bidirectional education, and mutual trust

Common steps in performing a “screen”



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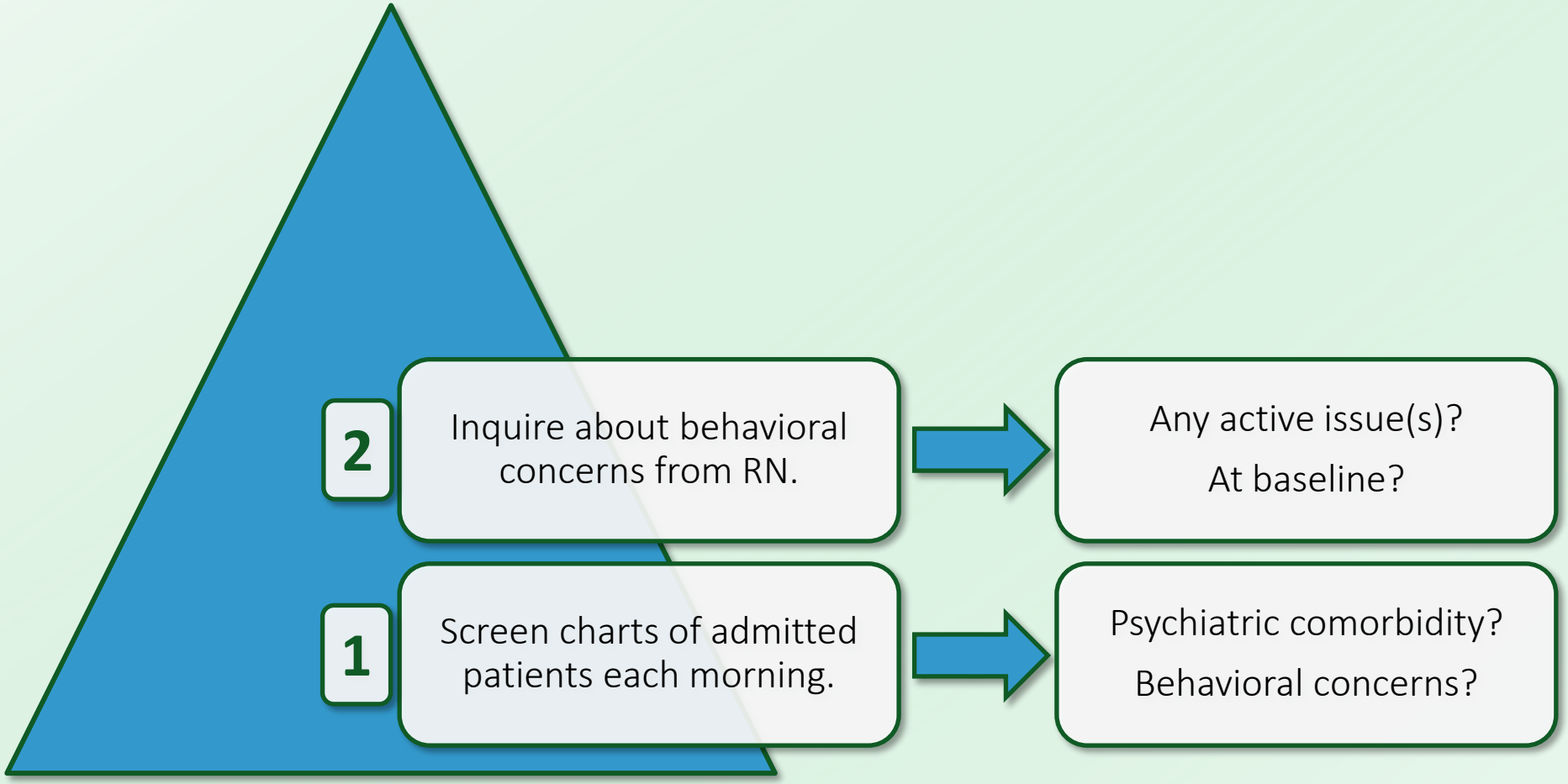

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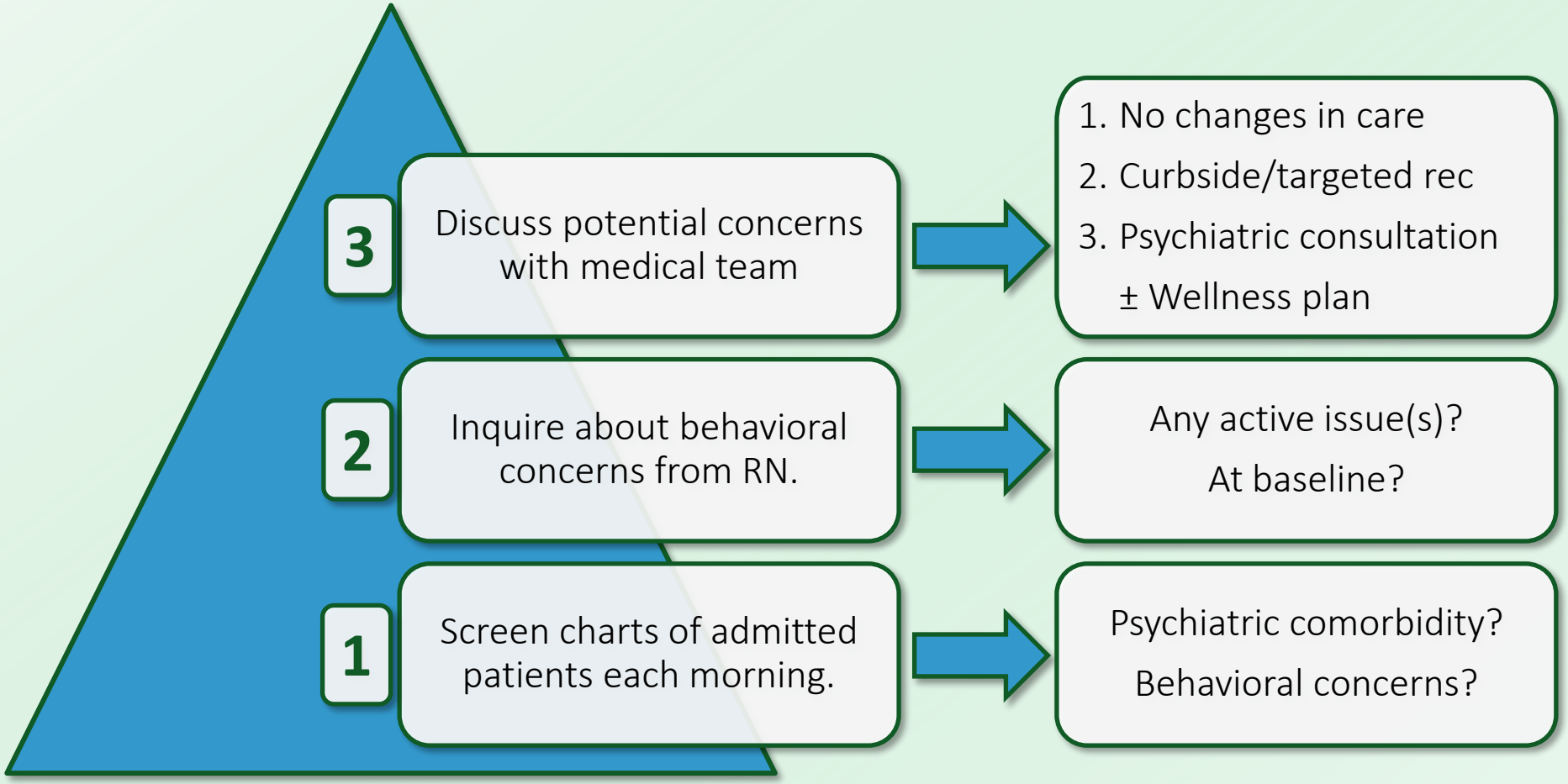

Notes about daily workflow

- **Before rounds** screening
- **Psychiatric rounds** often runs similar to traditional C-L rounds
- **Care delivery**
  - Interdisciplinary, nursing care, primary team rounds
  - Prioritize patients for care efficiency (e.g. care-compromising behaviors)
  - Consultations performed (often with SW)
  - Ongoing, real-time conversations with teams
  - Cuts down dramatically on the “discharge dependent” consult
  - Afternoons often provide opportunities for educational investment

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Future horizons for proactive C-L

- The field awaits the results of randomized trials of proactive C-L
  - The UK HOME Study[1]
- Expansion to additional settings with higher costs per patient
  - Critical care
  - Oncology
  - Surgery
- Further development within value-based care
  - Focus on vertical integration
  - Single-payer systems (*e.g.*, VA)

[1]Walker et al. The HOME Study. Trials. 2019.

Outcomes of interest to be explored further

- Financial impact beyond reduced length of stay
  - Cost of sitters & security
  - Cost of nursing turnover
  - Re-admission rates
  - Enhanced RVU
- Satisfaction: providers, nurses, patients, families
- Medical staff burnout
- Medical staff performance
- Patient symptoms, functioning, and outcomes
- Care quality: injuries (patients & staff) and falls
- Handoff to outpatient providers (vertical integration)

Questions remain

- Which elements of proactive C-L are required for which benefits?
- Are there more effective ways of operationalizing the four principles of proactive C-L?
- Which patient-specific factors (*e.g.*, age, population) and hospital contexts (*e.g.*, critical care, surgery) might experience differential benefits from different ways of delivering proactive C-L?
- What factors are associated with successful implementation and delivery of proactive C-L models?

The ACLP Proactive C-L Special Interest Group (SIG)

- Join the **growing community** of providers practicing proactive C-L psychiatry
- The Proactive C-L SIG offers an **active Listserv** to learn from others in the community
- Obtain **peer consultations** while pursuing proactive C-L
- Visit the Proactive C-L SIG website (www.clpsychiatry.org/sigs/proactive-cl-sig/)
- The Proactive C-L SIG **Resource Center** offers (…/proactive-cl-sig-resources/)
  - An **overview** of Proactive C-L Psychiatry
  - **Curated materials** from sites with Proactive C-L services
  - An **updated bibliography** on Proactive C-L
  - A review of **previous ACLP presentations** (symposia, workshops, *etc*.)

- **Unmet needs** — rethinking C-L psychiatry
- **Proactive C-L** — a modern approach
- **Daily operations** — the principles of proactive C-L in action
- **Future horizons** — C-L psychiatry for value-based care

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