# Med-Peds: The Past, Present, and Future

Dr. Natascha Thompson

Dr. Dan Wells

**UTHSC Horner Symposium** 

### **Goals and Objectives**

- Learn the history of Med-Peds founding
- Understand current landscape of Med-Peds, including the present-day workforce
- Describe UTHSC's standing in the Med-Peds community
- Discuss the role of Med-Peds trainees in the future of modern day healthcare

### **Disclosures**



 We are receiving no financial compensation for this presentation, though we must disclose that we are heavily invested in the future of Med-Peds

# The Beginning

1960's

Emergence of MP training programs

University of North Carolina and University of Rochester

1967

ABIM and ABP endorse concept of combined training

1969

Family Medicine recognized as a distinct specialty in the US



### Rise of Med Peds in the 1980's

1981

1<sup>st</sup> UTHSC MP resident starts training – Lance Patton 1982-1984

Growth spurt for MP programs

1989

Pediatrics publishes training guidelines for MP programs

## Med Peds Advancement as a Specialty

2005
First combined MP
PD at UTHSC

2007
ACGME accreditation
of combined MP
programs

2013
Growth of UTHSC MP
class to 12/year

### UTHSC - 360 Graduates Strong

### Graduate Medical Education:

- Kim Huch ('91) Internal Medicine PD and Chair, GME Internal Review Committee
- Natascha Thompson ('03) Medicine Pediatrics PD and Associate Dean for GME
- Colleen Hastings ('04) Nephrology and Peds Nephrology PD
- Jaclyn Bergeron ('13) Internal Medicine PD
- Gina Raymond ('14) Designated Education Officer VAMC
- Austin Dalgo ('15) Hospice and Palliative Medicine PD
- Dan Wells ('17) Medicine Pediatrics PD
- Nate Rogers ('19) GME POCUS Champion
- Desiree Burroughs Ray ('19) Chair, GME Wellness Subcommittee

### • Continuing Medical Education:

■ Michael Kleinman ('14) – Assistant Dean for CME

#### • UT Division Chiefs:

Shelley Ost ('09) – Division Chief Internal Medicine

#### Hospital Systems:

- Cassandra Howard ('03) CMO Methodist Germantown and MUH
- Burt Hayes ('99) Chief Medical Informatics Officer (CMIO)
   MLH and UCH
- Scott Howard ('98) CMIO St. Jude and Associate Dean for Research for CON
- Cyrilyn Walters ('11) Subacute Medical Director, ROH
- Elisha McCoy ('12) Chief of Hospital Medicine, LBCH
- Amber Thacker ('18) Chief of Hospital Medicine, ROH
- Chuck Fraga ('17) Chief of Medicine, VAMC

### Community:

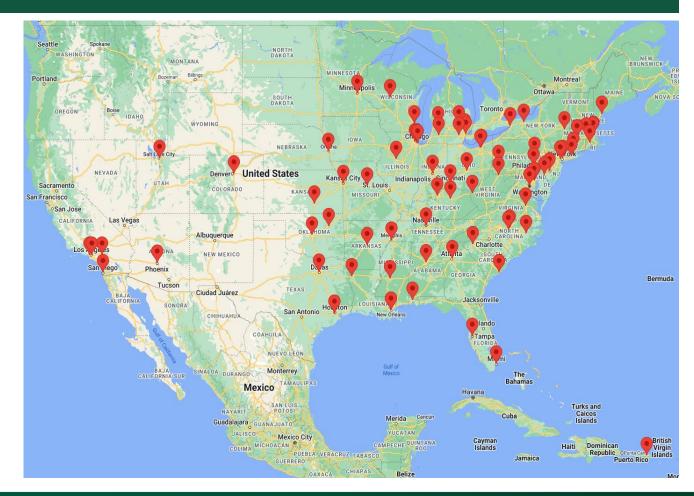
 Rick Donlon ('94) – co-founder Christ Community Health Services; co-founder and CEO Resurrection Health



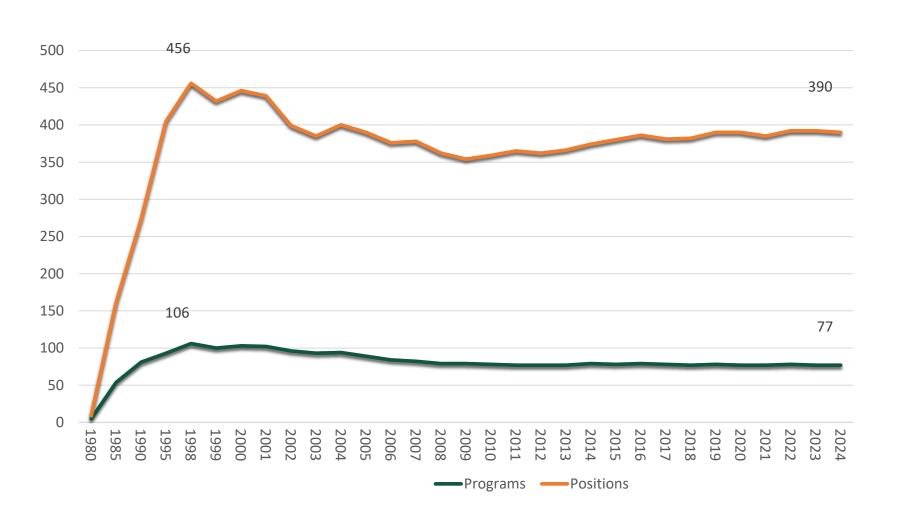
### The Present

### **Current State of Med-Peds**

- 78 Programs
- ~390 positions
- Heavily skewed to South, Northeast, Midwest
- More than half of programs with Pediatric residencies have Med-Peds residencies



## Growth, decline, and stability



Special thanks to Allen Friedland for this data set

## Why do students choose Med-Peds?

Study in 2005 by Robbins, et. Al showed the following were the top reasons a student would choose Med-Peds

- 1. Age Spectrum
- 2. Variety & Depth of Training
- 3. "Liked both"
- 4. Flexible career
- 5. Primary care focus
- 6. Ability to specialize
- 7. Role Models
- 8. Did not want OB/GYN or Surgery
- 9. Transitional care & Adolescent
- 10. More Pediatrics

**Specialists for Adults** 

÷

**Specialists for Kids** 

**Specialists for a Population** 

The decision to pursue Med-Peds is not one of indecision



### **Characteristics of Med-Peds Residents**

644 Applications for 390 spots

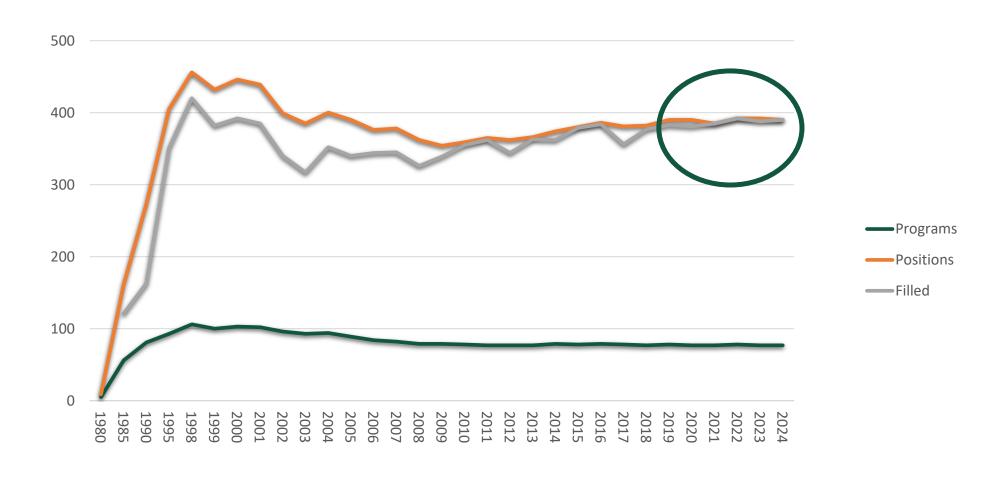
- 434 US MD Applicants
- 67 DO applicants

100% Fill Rate in 3 of last 4 years

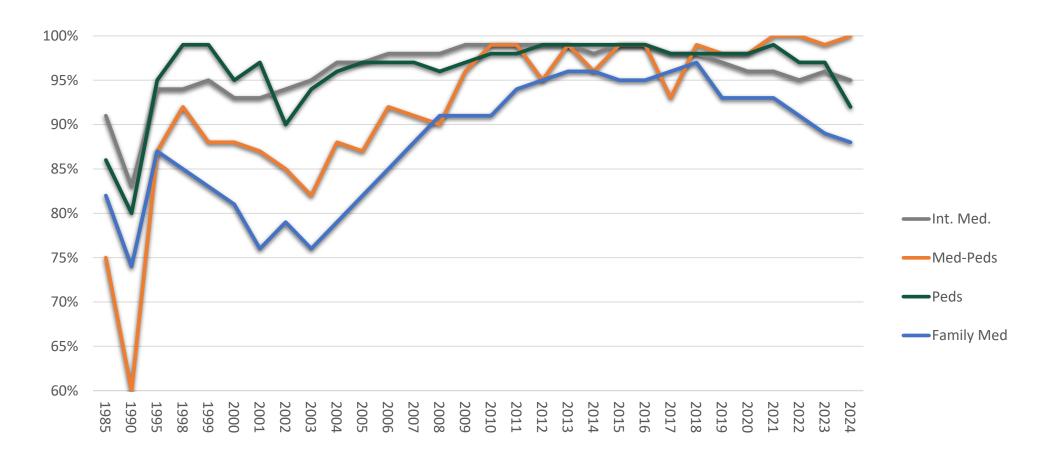
Table	Summary Statistics on U.S. MD Seniors
IP-1	Internal Medicine/Pediatrics

Measure	Matched (n=294)	Unmatched (n=46)
Mean number of contiguous ranks	11.3	
2. Mean number of distinct specialties ranked	1.3	2.0
3. Mean USMLE Step 1 score*	233	216
Mean USMLE Step 2 score	253	243
5. Mean number of research experiences	3.1	2.6
6. Mean number of abstracts, presentations, and publications	6.9	6.2
7. Mean number of work experiences	1.7	2.0
Mean number of volunteer experiences	5.1	4.8
Percentage who are AOA members	22.4	6.5
<ol> <li>Percentage who graduated from one of the 40 U.S. medical schools with the highest NIH funding</li> </ol>	36.1	17.4
11. Percentage who have Ph.D. degree	1.8	4.5
12. Percentage who have another graduate degree	24.8	34.1

### **Med-Peds Match**



### Med-Peds Match vs. other Primary Care



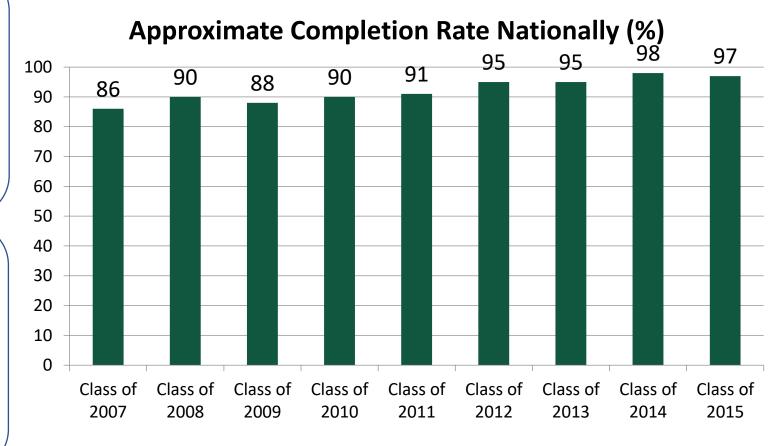
# The Med-Peds impact?

60% of graduating pediatrics residents said that combined programs enhanced their education, 39% no effect, only 1% negative impact

Friedland A, Melgar T, Kaelber D, Cull W, Chamberlain J, Kan B. Impact of combined pediatric residency training programs on the educational experience of the categorical pediatric residents. Association Pediatric Program Directors Annual Meeting, Poster Presentation 2009

# Pediatric residency programs with combined Med-Peds programs did better on pediatrics boards

Falcone JL. Residencies with Dual Internal Medicine and Pediatrics Programs Outperforms Others on the American Board of Pediatrics Certifying Exam. Clinical Pediatrics. 2014 May 6;53(9):854-857



# **Med-Peds during COVID**

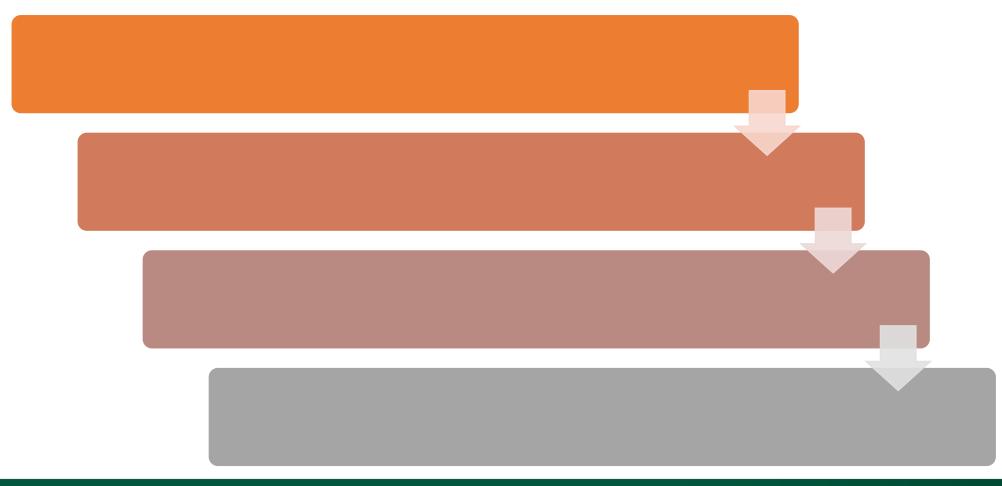


### Certification



Statistically comparable certification rates to categorical programs



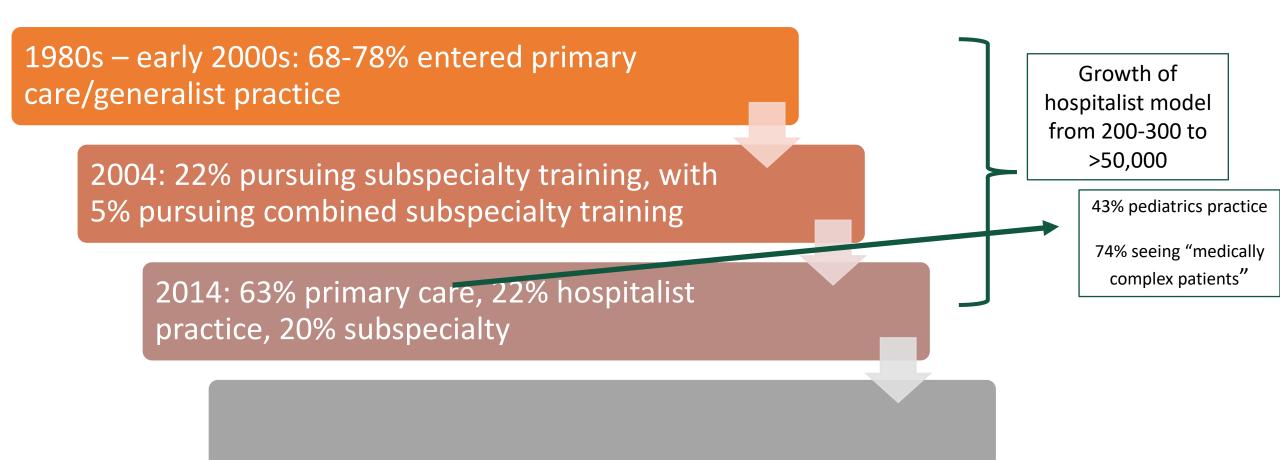


1980s – early 2000s: 68-78% entered primary care/generalist practice

1980s – early 2000s: 68-78% entered primary care/generalist practice

2004: 22% pursuing subspecialty training, with 5% pursuing combined subspecialty training

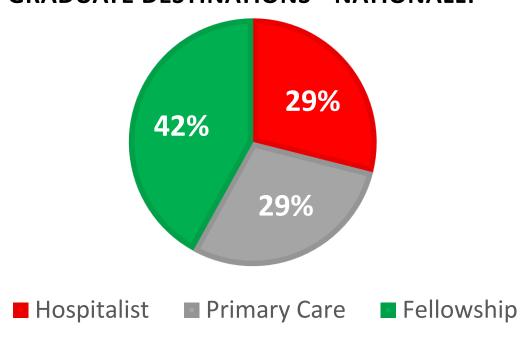




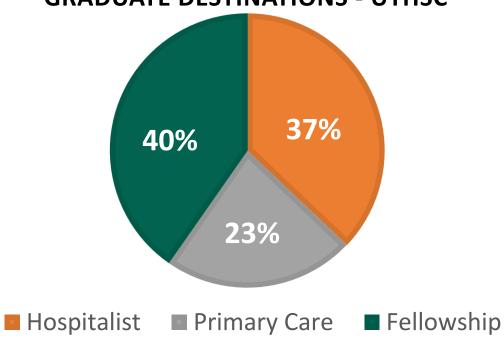
1980s – early 2000s: 68-78% entered primary Growth of care/generalist practice hospitalist model from 200-300 to >50,000 2004: 22% pursuing subspecialty training, with 5% pursuing combined subspecialty training 43% pediatrics practice 74% seeing "medically complex patients" 2014: 63% primary care, 22% hospitalist practice, 20% subspecialty Mirrors Categorical Trends 2023: 42% subspecialty, 29% hospitalist, 21% primary care

# UTHSC vs. Errbody

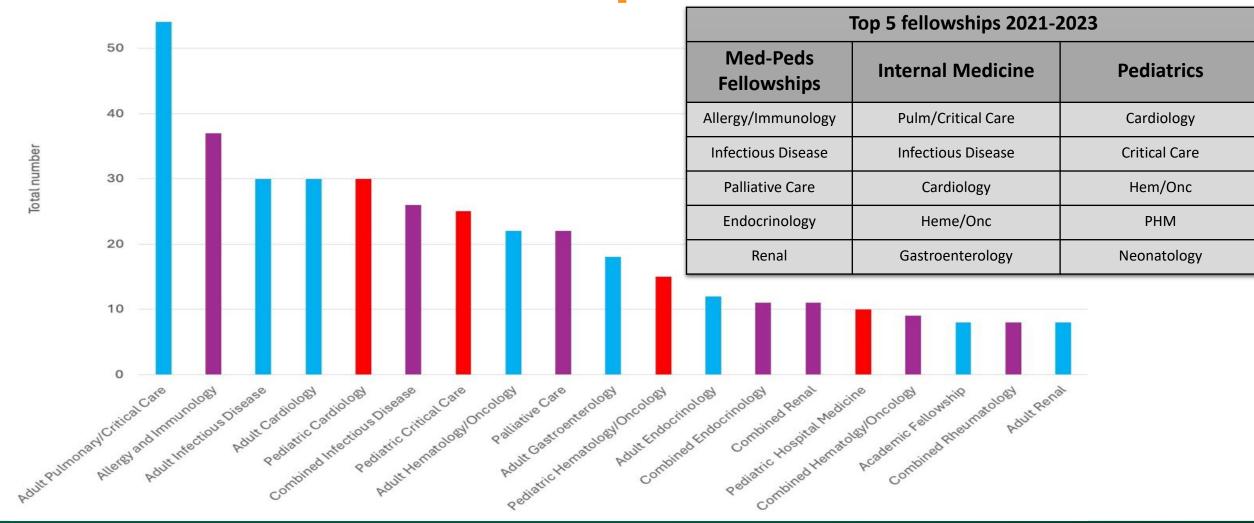
### **GRADUATE DESTINATIONS - NATIONALLY**



### **GRADUATE DESTINATIONS - UTHSC**



## **Fellowship Choices**



## **Med-Peds Grads in Memphis**

### **Specialty Trained Faculty and recent grads:**

**Endocrinology**: Sarah Allen, Anne Wynn, Jordan Ross, Alicia Diaz

Thomas

**Nephrology**: Colleen Hastings, Kim Huch

**Heme/Onc**: Jeff Harris, *Sarah Hashimi, Jamie Zeal, Alexa Rodriguez* **Pulmonary & Critical Care**: Kim Marsh, Patrick Higgins, Andrew Holt,

Nathan Wilds, Tonia Gardener, Jared Hogan, Danielle Severns

Sleep Medicine - Ariel Long

**Neonatology** - Stephanie Martinez, Anna Slagle **Gastroenterology** - John Whitworth, *Julia Esswein* 

Allergy/Immunology - Christie Michael, Venusa Phomakay, Alex

Kingsbury

Infectious Disease - Rachel Strength, Ashwini Joshi, Melissa

**Parkinson** 

Palliative Care - Austin Dalgo

Addiction Medicine - Jake Bezold

Adolescent Medicine - Melanie Ramos, Kevin Kuo

Global Health – Becca Gerrity, Selam Tesema

**Pediatric Hospital Medicine** – *Sean Dornbush* 

#### **Primary Care:**

Primary Peds - Academic: Debo Odulana

Primary IM - Academic: Shelley Ost, Michael Kleinman, Natascha

Thompson, Michele McAmis, Burt Hayes

**Community Practice**: Christie Earnest, Chris Wright, Allison Stiles, Stephen Johnson, Allison Montague, Bess Elliot, Missy Barnhart, Joel

Finley, Tracye Kyles

After Completion of Therapy Clinic: Daniel Mulrooney

St. Jude HIV Clinic: Shelley Ost

**Transitions of Care**: Michael Kleinman

#### Hospitalist:

VAMC: Chuck Fraga, Alain Rodriguez, Carrie Stallings, Gina Raymond,

Matt Cook, Michael Womack

ROH: Jaclyn Bergeron, Natalie Dunlap, Andy Pierce, Amber Thacker

**BMH**: Nathan Davidson

Methodist: Chris Adelman, Karen Andrews, Lauren Fulmer, Rachael

Smith, Kin Dempsey

Combined Hospitalists: Desiree Burroughs-Ray, Elisha McCoy, Nate

Rogers, Anna Allen, Amanda Hardy, Dan Wells

### Med-Peds is not a niche in Memphis – it is part of the culture



Mem

<sup>2</sup>Dep

Bonh Tenn

Tenn

<sup>4</sup>Divi

North

Medi

Anna

#### The increasing proportion of adult discharges at children's hospitals, 2004-2019

BACKGROUND: Researchers ha

(YSHCN) are not receiving

examines current transiti

METHODS: The 2016 Nationa

and includes 20 708 youth

transition planning occur

HCP actively worked with

care at age 18, and (3) you

Sociodemographic and he

RESULTS: Nationally, 17% of

measure. Older age (15-1)

meeting the overall trans

without SHCN. Other soci

differed among the 2 pop-

associated with transition

CONCLUSIONS: This study rev

planning support. It unde

in collaboration with pare

skills and prepare for adu

facilitating effective

Results: Response

that adolescents w

logical maturity (Me

determining timing

considered the two

and patients' lack of

as major barriers to

Conclusions: Del

Australia and New

at optimising con

improve outcomes

transition planning.

needs (SHCN).

Elisha McCov MD<sup>1,2</sup> | Jef



#### Perspectives of transfer and tra bowel disease

E. K. Wright, J. Williams, R. Ravikumaran, 8 J. Wilso P. V. Desmond, W. R. Co

<sup>1</sup>Department of Gastroenterology Melbourne, Victoria, 3Department Gastroenterology and Hepatology, <sup>7</sup>Sydney Children's Hospital, Sydne Tasmania and University of Tasman Research, Inflammatory Bowel Dise University of Otago, Christchurch,

#### Key words

transfer, transition, adolescent, infl bowel disease.

#### Correspondence

Peter De Cruz, Department of Gastroenterology, St Vincent's Hos Victoria Parade, Fitzroy, Melbourne Australia

Email: ppdecruz@gmail.com

Received 5 September 2013; accepted 8 January 2014.

doi:10.1111/imj.12402

### Transition Planning. US Youth With and V Special Health Care I

Current Rheumatology Reports (2019) 21: 57 https://doi.org/10.1007/s11926-019-0855-4

PEDIATRIC RHEUMATOLOGY (S OZ

#### Transitional Care in Rh care provider (HCP) discu from the Past 5 Years

Janet E. McDonagh 1 10 • Albert Fai

Published online: 6 September 2019 © The Author(s) 2019

#### Abstract

Purpose of Review Effective transition (RMD) is fundamental to rheumatolc

rheumatology and debate why universal implementation has yet to be recognised. Recent Findings Evidence of need for transitional care continues to be reported. The tr

poorly recognised, and the third phase following transfer to adult rheumatology is pa recognition of the age-related trajectories of transition skill development during young transitional care interventions have now been evaluated but the search for valid measu the need to study transition at a health system level is increasingly recognised.

Summary Future research in this area should consider the developmental trajectories model of transition readiness, which focuses on the interactions between AYA, caregive groups of gastroen part of) as these are the likely targets of any intervention to improve health transitions

Keywords Transitional care · Rheumatology · Chronic illness · Adolescents · Young a

### HOSPITAL MEDICINE

OBJECTIVE: Survey of adult-centered ho

tives on caring for adults with chronic dise

onset (CDoCO) to investigate comfort leve

gets of future educational and policy interv

METHODS: We developed an on-line

centered hospitalists based on a prior outr

introduced it to the Society of Hospital Med

via e-mail. Consent was implied by complet

RESULTS: Of all respondents, 60% saw

with CDoCO over a 6-month period. Amo

cine respondents, 40% did not feel comf

this population, with lack of familiarity with

of training in CDoCO, coordinating with m

www.journalofhospitalmedicine.com

#### **BRIEF REPORTS**

### Pediatric to Adult-Care Transitions in Childhood-Onset Chronic Disease: Hospitalist Perspectives

Susan Hunt, MD1,2\*, Niraj Sharma, MD3,4

<sup>1</sup>Department of Medicine, Division of General Internal Medicine, University of Washington Medical Center, Seattle, Washington; <sup>2</sup>Division of Hospital Medicine, Seattle Children's Hospital, Seattle, Wa

Boston, Massachusetts; 4Division of General Pedi BRIEF REPORT



### Age has an independent association with total cost of care in adults admitted to pediatric hospitals

Sean Robert Dornbush DO, MBA<sup>1</sup> | Michael Scott Kleinman MD<sup>2,3</sup> Elisha McCov MD<sup>4,5</sup> | Jeffrey Craig Winer MD, MA, MSHS<sup>4</sup> o Anna Quantrille Allen MD<sup>6</sup>

<sup>1</sup>Internal Medicine-Pediatrics, The University of Tennessee Health Science Center, Memphis, Tennessee, USA

<sup>2</sup>Internal Medicine, University of Tennessee Health Science Center, Memphis, Tennessee, USA

General Pediatrics, Le Bonheur Children's Hospital, Memphis, Tennessee, USA

<sup>4</sup>Pediatric Hospital Medicine, Le Bonheur Children's Hospital, Memphis, Tennessee, USA

<sup>5</sup>Department of Pediatrics, The University of Tennessee Health Science Center, Memphis, Tennessee, USA

6Internal Medicine, University Of Tennessee Health Sciences Center College Of Medicine, Memphis, Tennessee, USA

Sean Robert Dornbush, DO, MBA, Internal Medicine-Pediatrics, The University of Tennessee Health Science Center, Memphis,

Email: sdornbus@uthsc.edu

#### Abstract

Previous studies in adults admitted to pediatric hospitals primarily investigated associations between complex chronic condition characteristics and patient outcomes Our study explored the association of age with length of stay (LOS) and total cost in these adults, accounting for other patient factors. Using the Pediatric Health Information System, we included 1,215,736 patient encounters from 2021 to 2022. Unadjusted and adjusted analyses were performed using bivariable and multivariable log-linear regression. There was a significant positive association between age and total cost, with adults 18-20 years having 13% higher total cost (95% confidence interval [CI]: 12%-15%), 21-25 years with 25% higher total cost (95% CI: 22%-29%), and 25-99 years having 72% higher total cost (95% CI: 66%-79%) than 1-17 years. Our findings suggest expanding upon the existing status quo to identify the most appropriate environment to care for this unique and growing population, especially given the anticipated reduction in pediatric beds and subspecialty expertise.

### The Future of Med-Peds







MPAC

**Med-Peds Academic Channel** 

The future of Med-Peds... is bright!



### Reference

- 1. Ferrari ND, Shumway JM. Combined internal medicine/pediatric residency training programs. *Pediatrics*. 1989; 84(1): 94-97
- 2. American Board of Pediatrics. Guidelines for combined internal medicine-pediatrics residency training programs. *Pediatrics*. 1989; 84(1): 190-194
- 3. Hunt S, Sharma N. Pediatric to adult-care transitions in childhood-onset chronic disease: hospitalist perspectives. J Hosp Med. 2013 Nov;8(11):627-30. doi: 10.1002/jhm.2091. Epub 2013 Oct 12. PMID: 24124077.
- 4. Wright EK, Williams J, Andrews JM, Day AS, Gearry RB, Bampton P, Moore D, Lemberg D, Ravikumaran R, Wilson J, Lewindon P, Radford-Smith G, Rosenbaum J, Catto-Smith A, Desmond PV, Connell WR, Cameron D, Alex G, Bell SJ, De Cruz P. Perspectives of paediatric and adult gastroenterologists on transfer and transition care of adolescents with inflammatory bowel disease. Intern Med J. 2014 May;44(5):490-6. doi: 10.1111/imj.12402. PMID: 24589174.
- 5. Lebrun-Harris LA, McManus MA, Ilango SM, Cyr M, McLellan SB, Mann MY, White PH. Transition Planning Among US Youth With and Without Special Health Care Needs. Pediatrics. 2018 Oct;142(4):e20180194. doi: 10.1542/peds.2018-0194. Epub 2018 Sep 17. PMID: 30224366.
- 6. Robbins BW, Ostrovsky, D, and Melgar, T. Factors in Medical Students' Selection and Ranking of Combined Medicine-Pediatrics Programs. Academic Medicine. 80 (2), February 2005;199
- 7. Ting DY, Kaelber DC, Simon SR. Characteristics of medicine-pediatrics practices: results from the national ambulatory medical care survey. Acad Med. 2009;84(3):396-401.
- 8. AMPP.org
- 9. NMPRA.org
- 10. Charting Outcomes of the Match, NRMP.org
- 11. ABP.org
- 12. ABIM.org
- 13. National Resident Matching Program fellowship match data and results. (2023). Accessed: December 1, 2023: <a href="https://www.nrmp.org/match-data-analytics/fellowship-data-reports/">https://www.nrmp.org/match-data-analytics/fellowship-data-reports/</a>.
- 14. Frohna JG, Melgar T, Mueller C, Borden S: Internal medicine-pediatrics residency training: current program trends and outcomes. Acad Med. 2004, 79:591-6. 10.1097/00001888-200406000-00018
- 15. Donnelly MJ, Thornton SC, Radabaugh CL, Friedland AR, Cross JT, Ruch-Ross HS: <u>Characteristics of the combined internal medicine-pediatrics workforce</u>. Am J Med. 2015, 128:1374-9. 10.1016/j.amjmed.2015.08.01
- 16. Agrawal A, Wells D, Kisielewski M, et al. (July 29, 2024) Subspecialty Choices Among Medicine-Pediatrics Graduates: Results From a Four-Year National Program Director Survey. Cureus 16(7): e65665. doi:10.7759/cureus.65665