
Integrated Care Models for Long-COVID Clinics

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What is integrated care?

- ◆ **System of care across the spectrum focused on delivery of care**
- ◆ **Team based approach**
- ◆ **Address the health needs of the whole person**
- ◆ **Multi-disciplinary**
- ◆ **Traditionally includes primary care and behavioral health**
- ◆ **Has been used in multiple other complex medical conditions including spinal cord injury, hemophilia, MS, and stroke**



Case for Integrated Care Models for Long-COVID Clinics

- Individuals who have survived COVID have been noted to have significant deficits in physical and cognitive functioning and worsened quality of life.
- Feeling of being shuffled from provider to provider
- Patients lack a “home” in the medical system
- Lack of expertise in challenging new condition



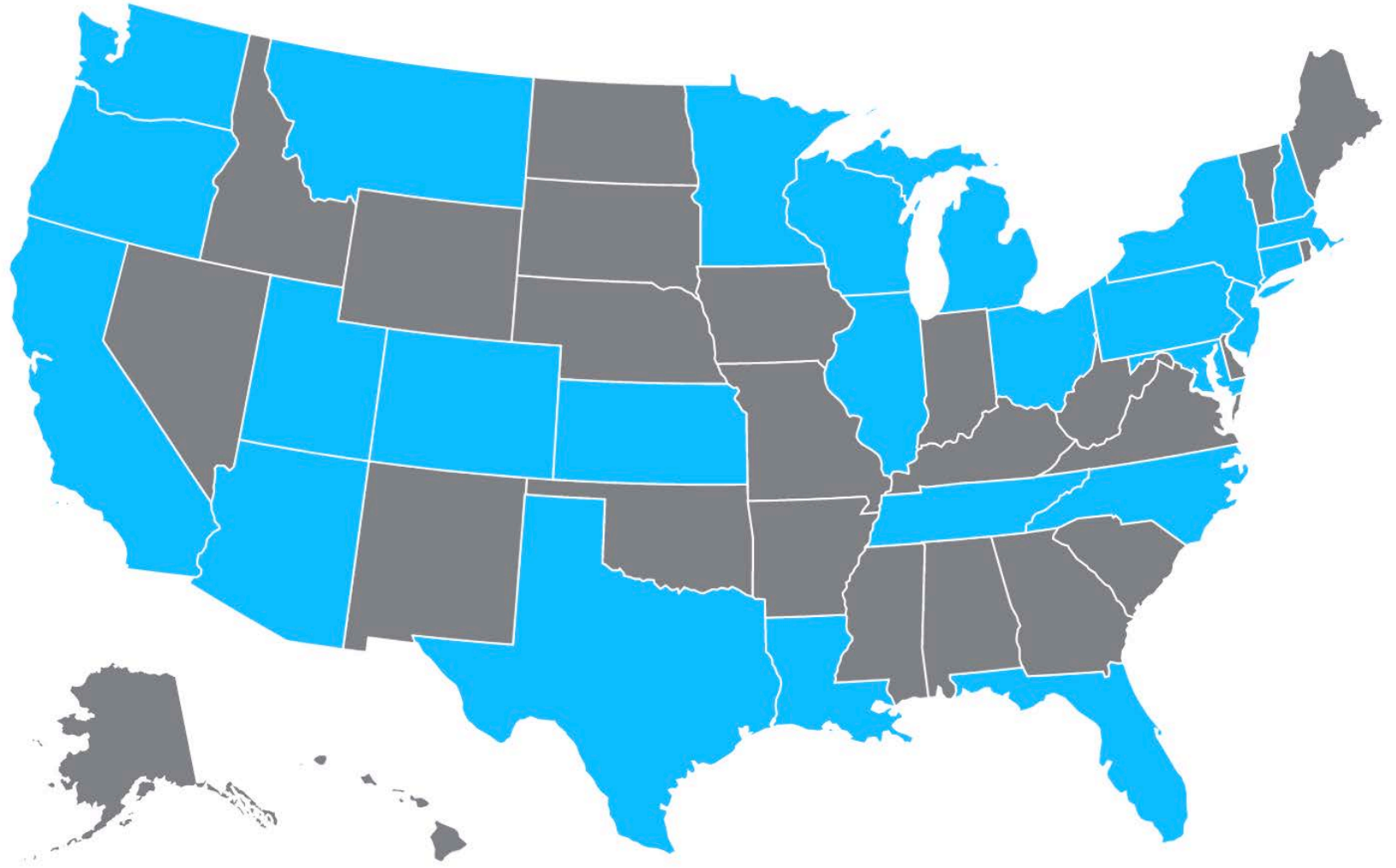
Case for Integrated Care Models for Long-COVID Clinics

- NICE: One stop multidisciplinary clinics are recommended, led by a doctor with relevant specialist skills and experience. NHS England has also emphasised the importance of multidisciplinary assessment and diagnostics being available in long covid clinics to avoid multiple referrals to different specialists
- CDC: Healthcare professionals may also consider referral to multidisciplinary post-COVID care centers, where available, for additional care considerations. Multidisciplinary post-COVID care centers based in a single physical location can provide a comprehensive and coordinated treatment approach to COVID-19 aftercare

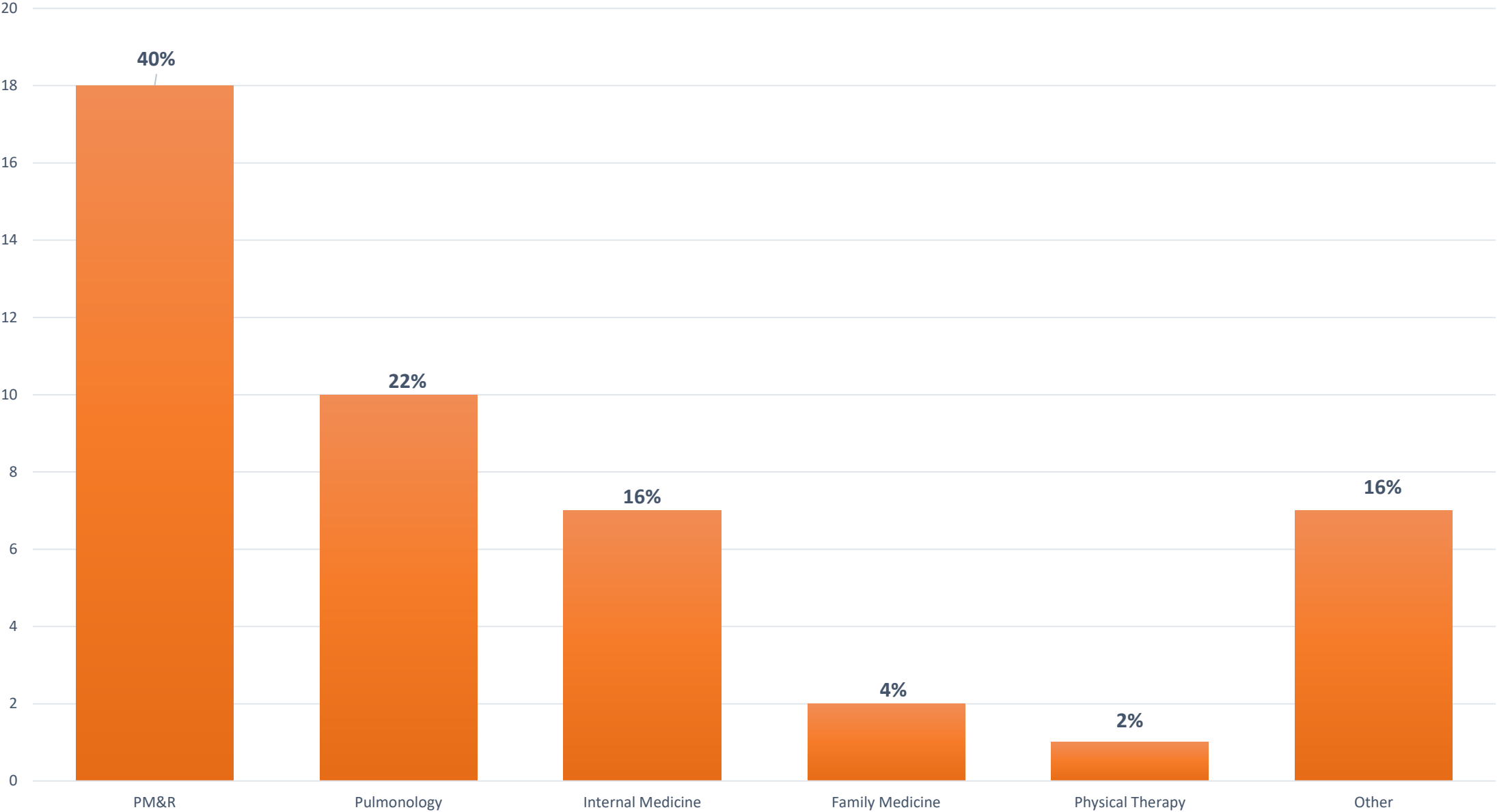
PASC Clinic Survey



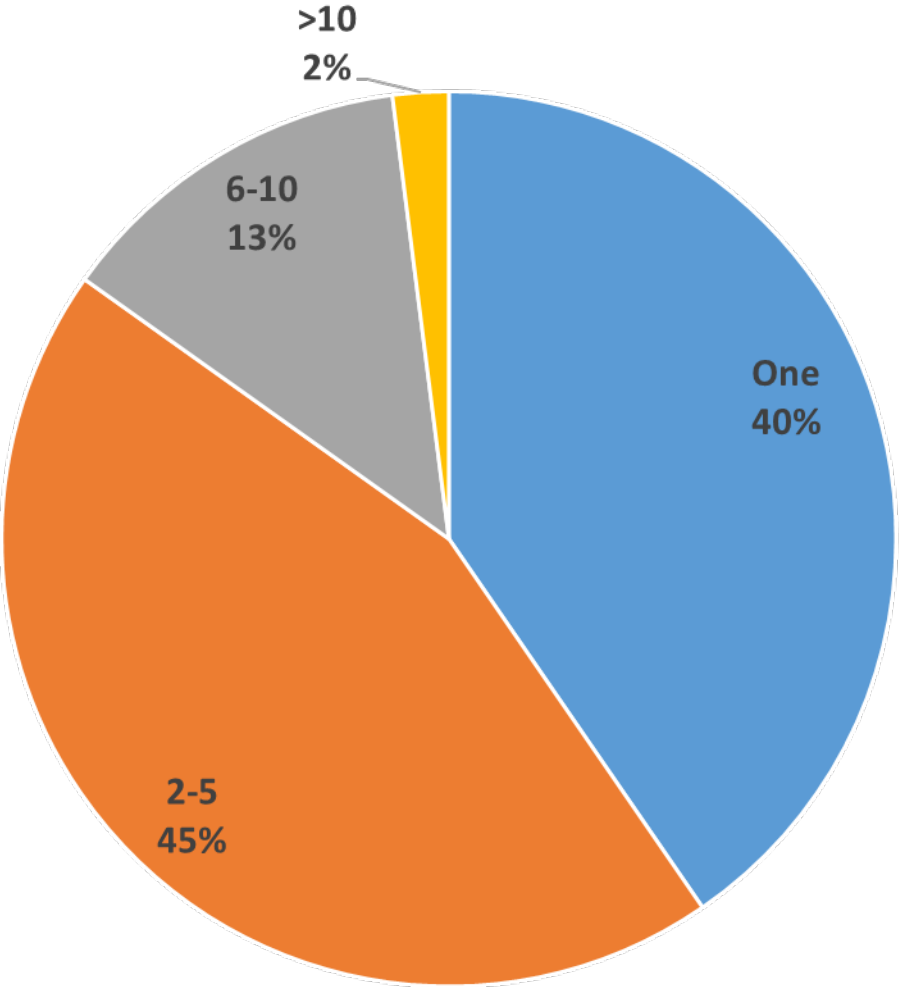
46 Clinics
25 States



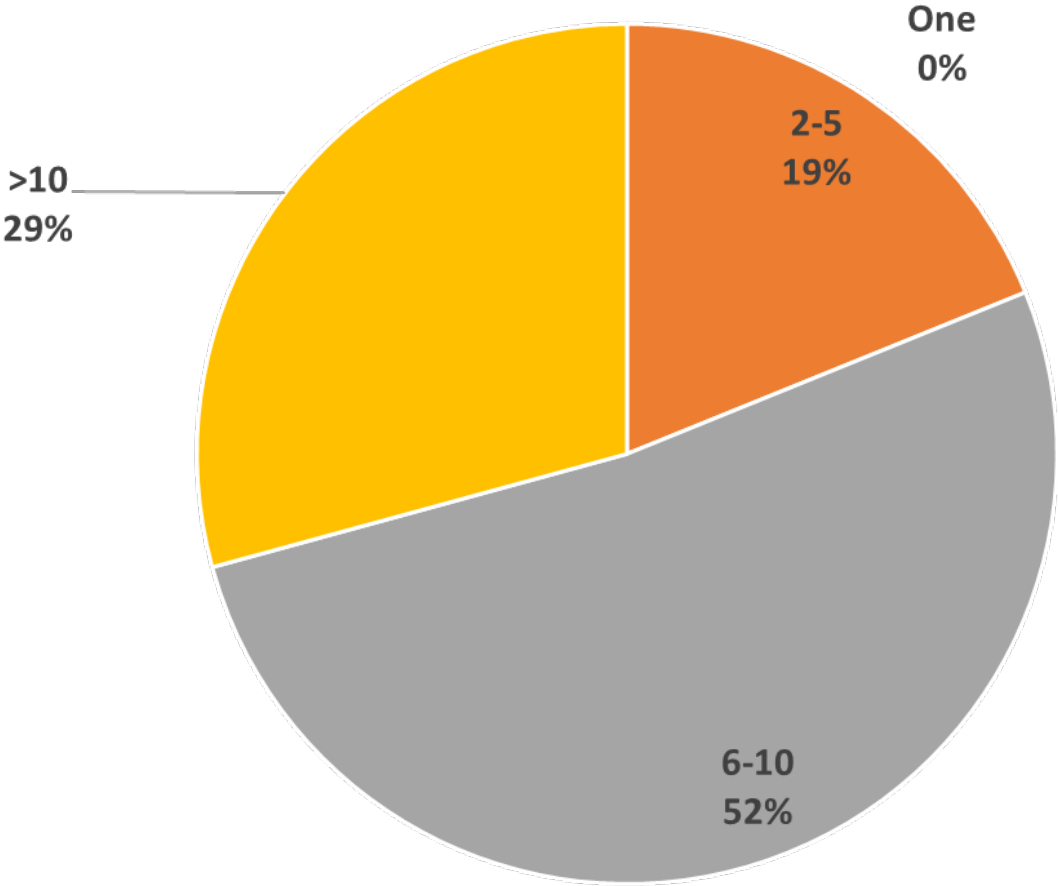
What Department are Clinics Home In?



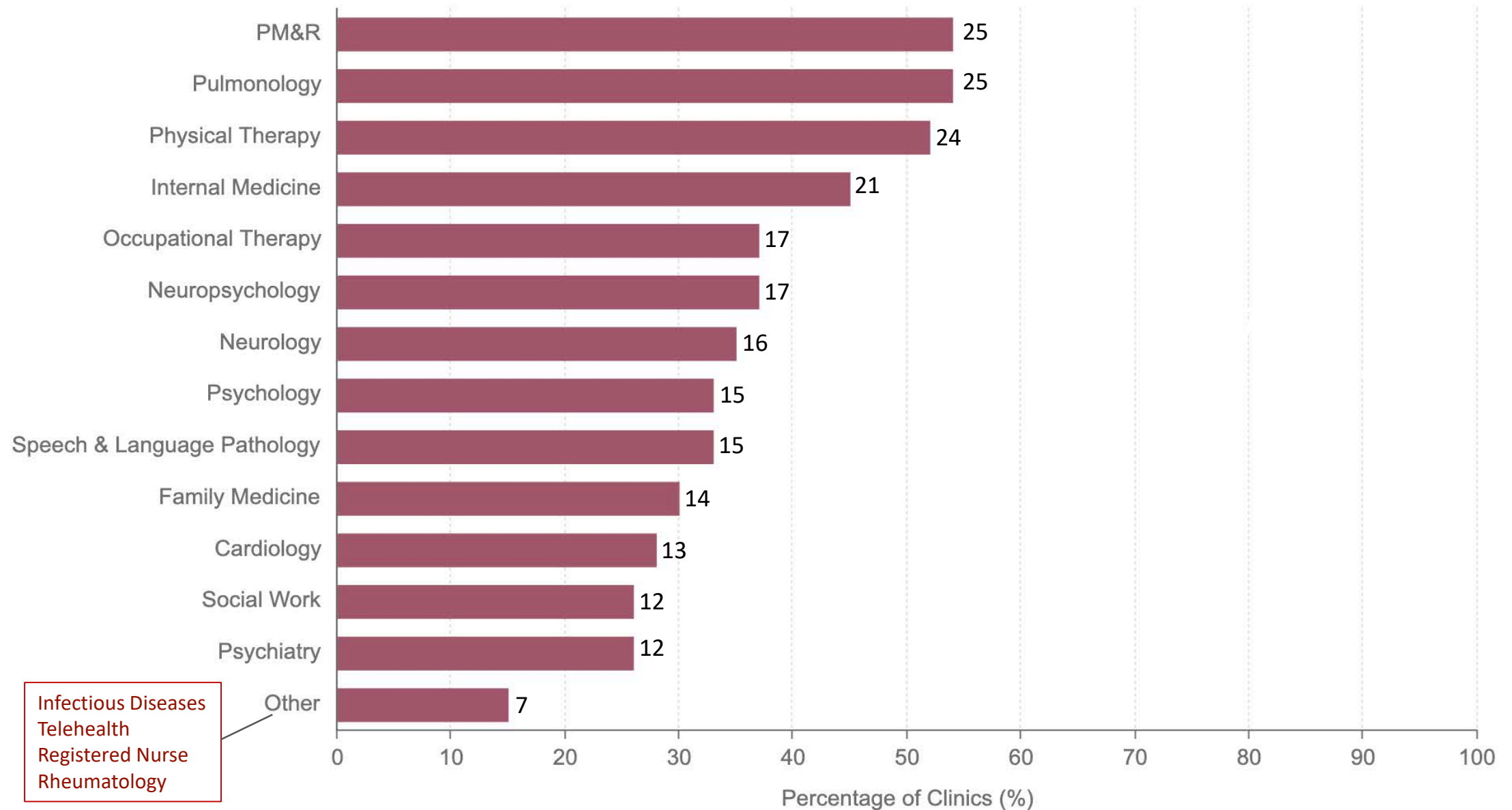
Number of Specialties Routinely Involved



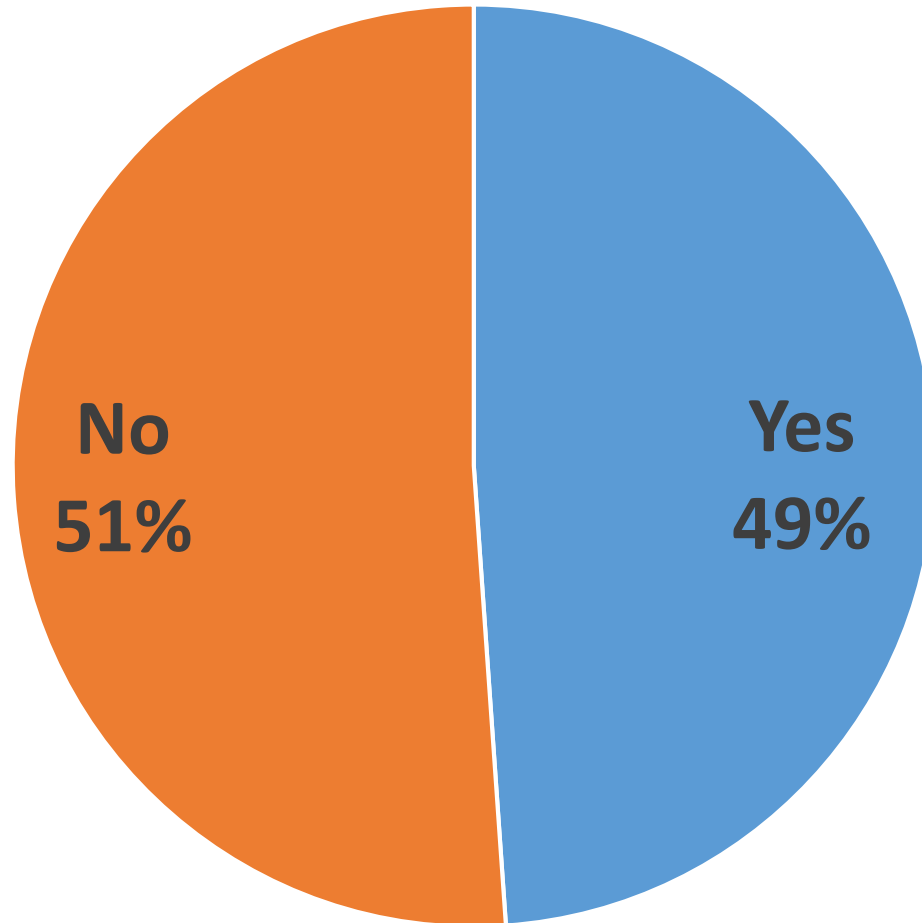
Number of Specialties Part of Team



What specialties are available during the initial patient visit?



Formal Interdisciplinary Team Meetings

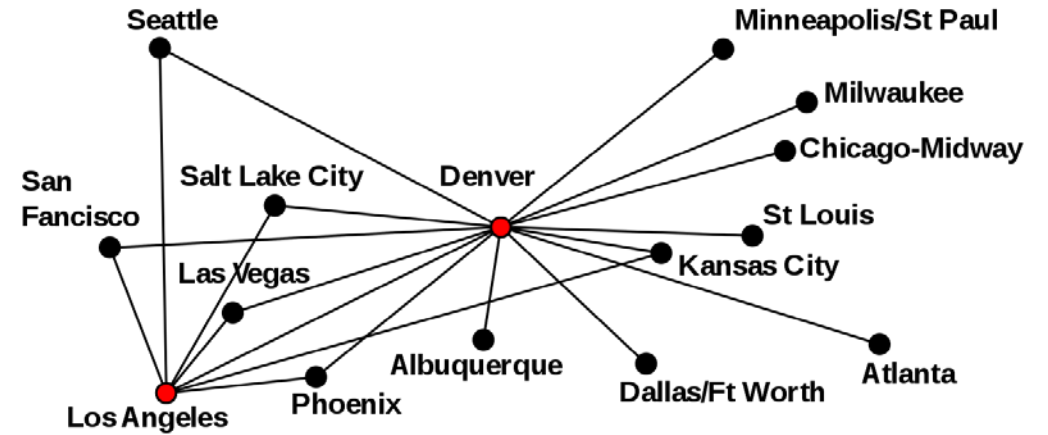


Other Interesting Findings

- 51% of clinics directly managed behavioral health needs of their patients
- 33% hosted support groups
- 64% completed disability paperwork
- 24% reported need for more staffing, physicians and social work support

Survey Lessons

- All clinics have processes to involve multiple specialties
- Routinely involve multiple specialties vs. hub and spoke model
- Half clinics have interdisciplinary team meetings
- Physical therapy, pulmonology, PM&R, neurology, and cardiology involved in treatment team in over 2/3 of clinics



Penn Medicine Post-COVID Assessment and Recovery Clinic

Post-COVID PM&R Team

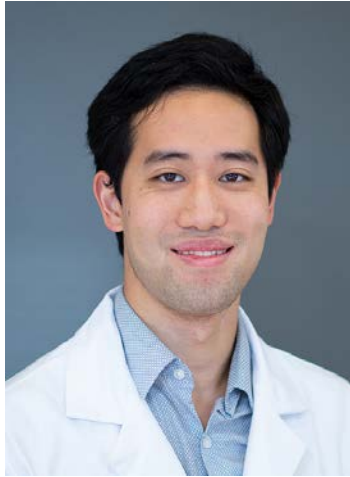
- Centered in Physical Medicine and Rehabilitation
- Background in taking care of patients with multi-system, complex medical issues
- Team developed over time



Benjamin Abramoff MD



Franklin Caldera DO



Jason Pan MD



Joanna Ellis CRNP



Angela Cucchi MSW,
LSW

POST COVID Team

Pulmonology



Rob Kotloff MD
Cardiology



Joel Deitz MD



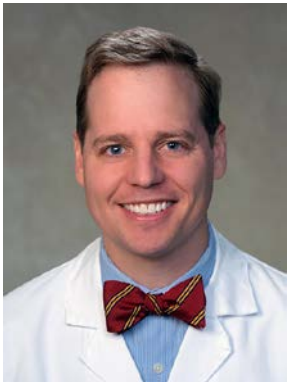
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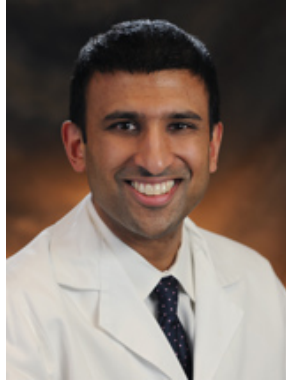
Jessica Dine MD
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Janae Heath MD



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Rajat Deo MD



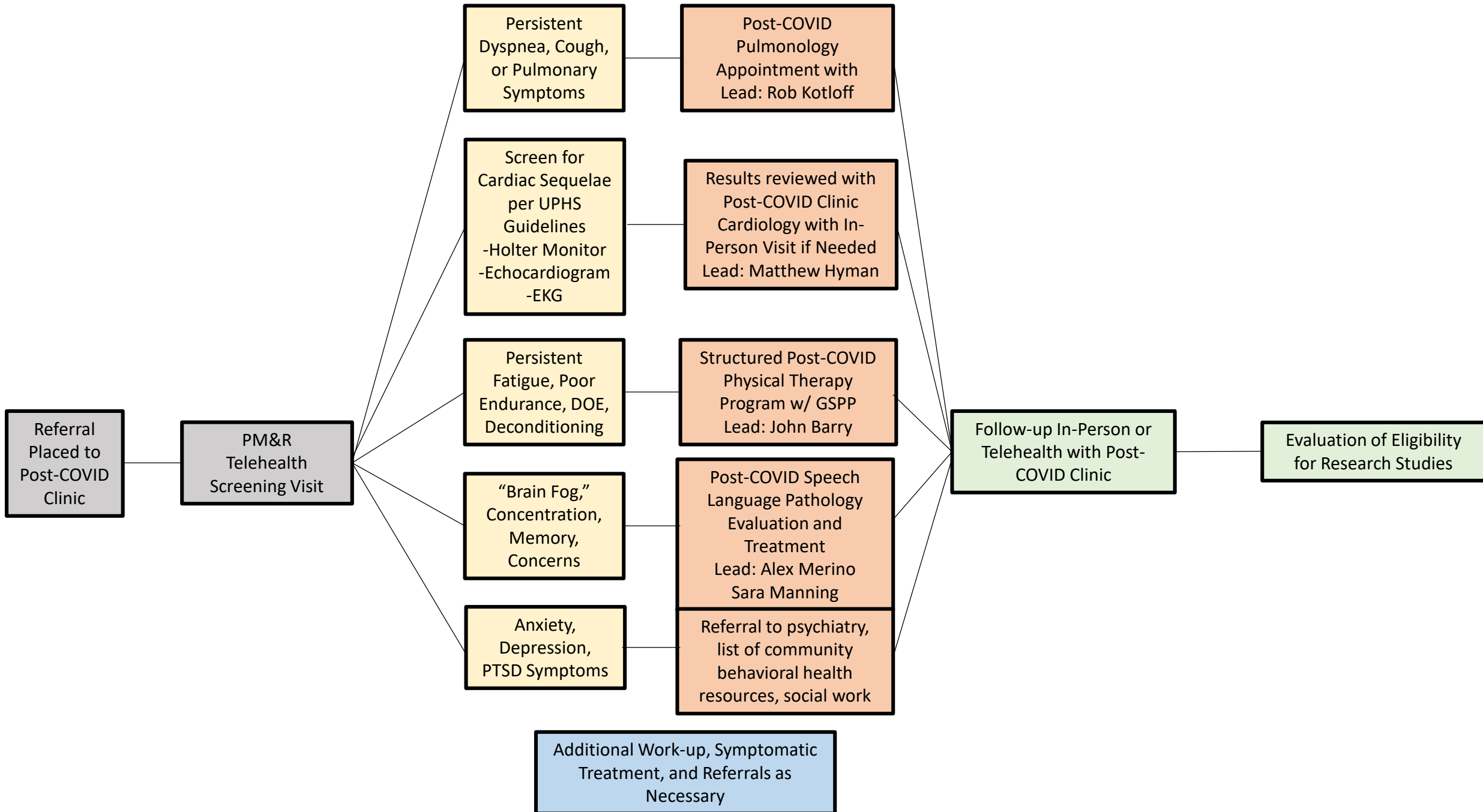
Sara Manning MD

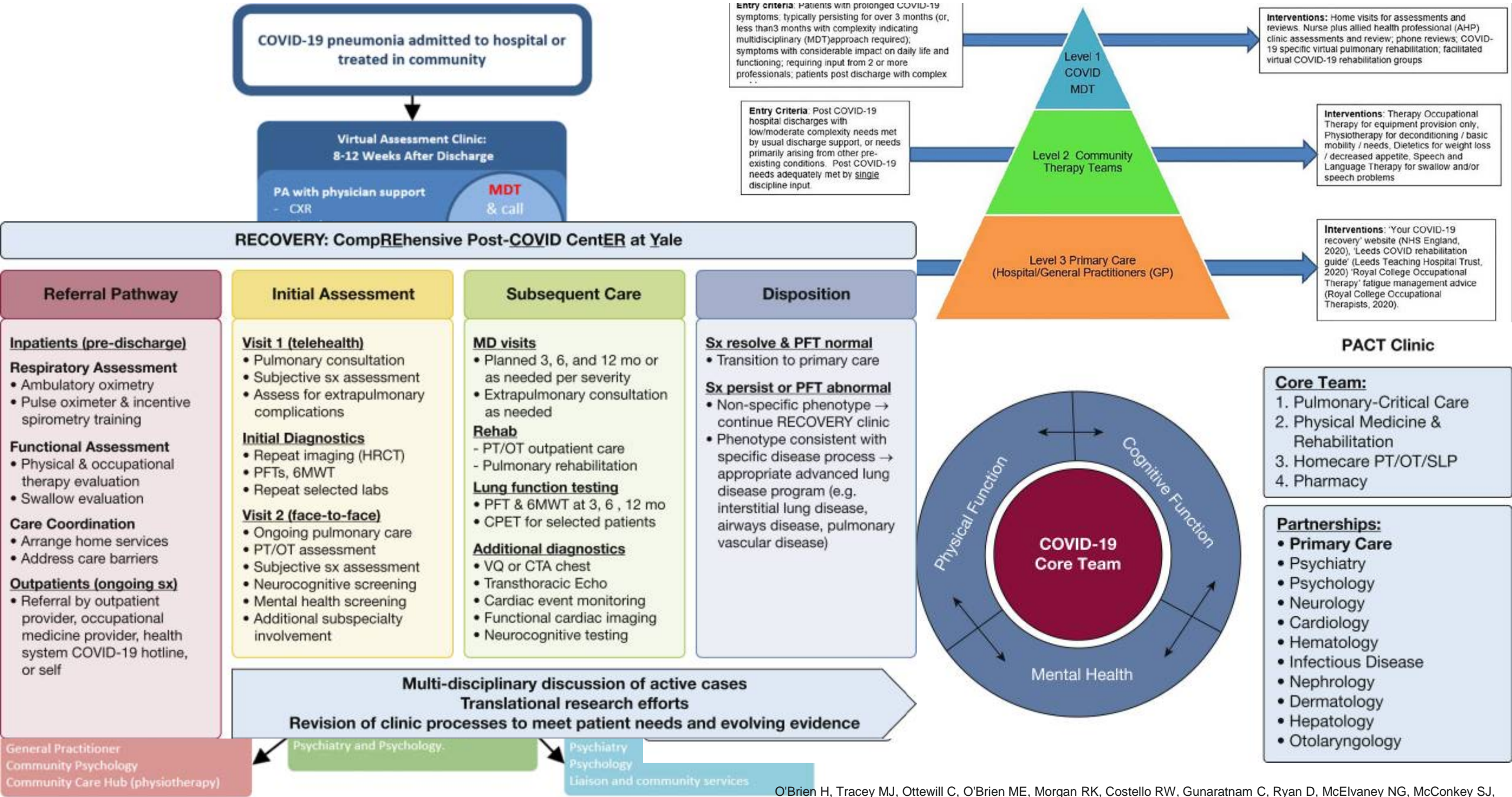


John Barry DPT



Alex Merlino SLP





O'Brien H, Tracey MJ, Ottewill C, O'Brien ME, Morgan RK, Costello RW, Gunaratnam C, Ryan D, McElvaney NG, McConkey SJ, McNally C, Curley GF, MacHale S, Gillan D, Pender N, Barry H, de Barra E, Kiernan FM, Sulaiman I, Hurley K. An integrated multidisciplinary model of COVID-19 recovery care. Ir J Med Sci. 2021 May;190(2):461-468. doi: 10.1007/s11845-020-02354-9. Epub 2020 Sep 7. PMID: 32894436; PMCID: PMC7475726.

Barlin A, Deviger J, Torrant B, Rose D, Holman S, Simms A, Salzman R, Silver M. A Multidisciplinary NHS COVID-19 Service to Manage Post-COVID

Intensive Care Unit (ICU); High Dependency Unit (HDU); Chest x-ray (CXR); multidisciplinary team (MDT); pulmonary function testing (PFT); 6-minute walk test (6MWT); short form health assessment (SF-36); high resolution computer tomography (CT).

Conclusions

- Integrated care is a potential method to improve the care of individuals with long COVID
- Numerous integrated care models have been implemented
- Can be resource intensive and requires significant coordination between providers
- No research yet that suggests if one model is the more effective than others

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