### eBook

# Solving Healthcare's "Black Box" Referral Problem





## **Table of Contents**



PAGE 1 What is the healthcare "black box" problem?



PAGE 2 Overcoming the black box referral problem of getting to the right doctor



PAGE 3 Medical experts weigh in on referral challenges



PAGE 5 Consequences as a result of a delayed or incorrect diagnosis



PAGE 6 Objective Clinical Navigation is the solution



PAGE 7 Outcomes improve when 'the right doctor' is truly right for a patient



PAGE 4 The current referral process is misleading



PAGE 8 Every stakeholder benefits from better physician matching



## What is the healthcare "black box" referral problem?

The idea of a black box is related to testing algorithms: the output should be predictable based on the input.

The healthcare black box is the result of a lack of quality transparency and technology available to consumers and their referring clinicians.

Referrals from friends, clinicians, and health plan/hospital provider directories, become a roulette wheel with respect to quality and the qualifications of physicians matched to patient needs.

- There are more than 30,000 recognized diseases, 900,000 medical specialists and hundreds of subspecialties, making for a complex patient-physician matching process.
- Quality of care and patient outcomes vary widely depending on the match made.
- Referring physicians do not have complete transparency to the quality or qualifications of specialists recommended.
- ▶ PCPs often do not have the resources to find. or a monetary incentive to make, the best referral available for the patient.

## 30%

of total healthcare spend is wasted, estimated to be \$900B a year, including over-testing, over-treatment, misdiagnosis and wrong treatments.1

# Overcoming the black box referral problem of getting to the right doctor

Referrals are too often adhoc or random. This has to change to acheive the Quadruple Aim: optimal outcomes, lower costs, a better patient experience and happier physicians. PCPs can affect better overall health of their patients and specialists will see more patients whose diagnosis fits their area of clinical focus.

- In 2019, ArmadaHealth conducted a survey of adult U.S. consumers. 78% of them seek medical care at least once per year, 49% more often - but 1 in 4 delay getting care because they don't trust the medical system.
- Unnecessary testing, misdiagnosis and wrong treatments are more likely when inaccurate patient-physician matching occurs. It's proven that doctors that have significant experience in the condition they are treating, will affect better outcomes.



40% of adults surveyed by ArmadaHealth have been misdiagnosed and/or know someone who has been.



## **Medical experts** weigh in on referral challenges

**Our Clinical Advisory Board** (CAB) members are top doctors nationally, in their specialty. They joined ArmadaHealth because they understand the black box referral problem is key to fixing our healthcare system.

66

*If a patient can find the right doctor* with the right specialty training and the right fit, it's good for the patient. It's also good for our systems because our healthcare costs are too high. If we can narrow that waste, we're winning as a system, we're winning as doctors, and we're winning as patients."

#### DAVID L. HELFET, MD

Chief of Combined Orthopaedic Trauma, Hospital For Special Surgery/ New York Presbyterian Hospital ArmadaHealth CAB Member

Getting that patient to the right physician the first time is critical to optimizing the value of healthcare today."

#### IAN H. KALFAS, MD

Head of Spinal Surgery, Department of Neurosurgery, Cleveland Clinic ArmadaHealth CAB Member

## The current process has developed widespread mistrust in today's healthcare system

As they exist today, physician referrals are often carried out independently and without sufficient information. Whether self-guided or facilitated by a referring physician, these connections are highly subjective.

- The defacto way for patients to find physicians is to use online Find-a-Doc tools. *Physicians* Working Together started a petition with 43,000+ signatures for Yelp and HealthGrades to take down consumer ratings because of lack of validation<sup>2</sup>.
- The subjectivity inherent in referrals today has created a negative cycle of poor matches, delays in finding the right doctor and mounting mistrust of the healthcare system.
- Consumers and plan sponsors continue to pay high costs for healthcare and receive low value in return.



Patients today are empowered, engaged, and in order for them to navigate the system, they need the right information."

THE HON. DAVID J. SHULKIN, MD Special Advisor to ArmadaHealth

# There are severe consequences as a result of a delayed or incorrect diagnosis

When a patient doesn't receive a timely, accurate referral to a qualified physician, that specializes in their condition, the ongoing impact can be costly in dollars and health outcomes. And, too often, serious morbidity or loss of life is the result.

 Despite the high-quality doctors and facilities in the U.S. healthcare system, outcomes are lagging when compared to worldwide performance.

- Preventable medical errors are the thirdleading cause of death among U.S. patients, showing the importance of not just getting care but receiving the right type of care from the correct physician<sup>3</sup>.
- Initial diagnoses are often mistaken according to the Mayo Clinic, only 12% of initial diagnosis and treatment plans were confirmed by a second opinion. In 21% of cases, the diagnosis changed completely - the average costs of treating these patients were four times higher than for those with an accurate diagnosis.<sup>4</sup>

In a 10-year study of malpractice, 85% of the cases attributed the outcome to "clinical judgement", where the clinician being sued was perceived to lack qualifications to diagnose and/or treat the patient<sup>5</sup>.





## **Access to Objective Clinical Navigation is** the solution

There are alternatives to the standard black box referral process that can move patients and providers in the right direction. This is objective clinical navigation, a data-driven approach that combines empathetic and patientcentric principles with advanced data science and machine learning (DSML).

### **Components of Objective Clinical Navigation**

#### **High Tech**

- The underpinnings of our DSML platform include an expansive, proprietary ontology defining 30,000+ medical conditions and data attributes that reflect expertise within a specialist's profile.
- The brain of our platform is a patent-pending relevancy engine that determines a physician's expertise in their sub-specialty, related conditions and Area of Clinical Focus.
- Billions of claims representing 80% of commercial and 100% of CMS are ingested to determine physicians' practice patterns.

### **Right Touch**

- DSML enables objective patient-physician matching; but, because healthcare is complicated, human oversight is required. Our services provide expert clinical navigators as warranted.
- Until automated solutions guarantee 100% accuracy, appointment availability, contact info, location/office hours, and coverage accepted, must be verified by a human.



## Outcomes improve when 'the right doctor' is truly right for a patient

When a person is matched with the correct medical specialist for his or her condition, the healthcare system can work as intended, with the results to match. This means more than simply finding a physician with correct general specialty - there are more levels of compatibility that we consider:



A great physician referral that can't see a patient for months is practically worthless. It's even more important now that patients can get into to see the right physician at the right time.

Furthermore, a great doctor, out-of-network, is, again, worthless to a patient. Narrow networks without quality clinical navigation are creating a worse experience on top of a bad experience.

Specialists don't typically turn down referred patients. When the referrals are accurate, they won't have to, because people will be in the right place already.



## **Every stakeholder benefits from better** physician matching

Adopting an Objective Clinical Navigation solution enables optimal patient journeys beginning with the first referral, paving the path to the Quadruple Aim.

Consumers receive better care more quickly, increasing their chance of better outcomes and limiting their out of pocket costs.

- eliminating waste.
- guarantee accurate referrals.
- High Quality doctors are rewarded with referrals.

**Objective Clinical Navigation makes these outcomes possible** and enables the healthcare system to reach its potential.



Employers can mitigate the burden of employees' interactions with the healthcare system, resulting in higher productivity and lower costs by

Care management organizations and advocacy groups can leverage our Navigation-as-a-Service solution, outsourcing clinical navigation to

Physicians are referred patients that satisfy their Area of Clinical Focus.

In the face of changing norms such as increased use of telemedicine in the wake of COVID-19, clinical navigation must evolve along with the industry.



### armadahealth.com

### Contact us at marketing@armadahealth.com



1 https://jamanetwork.com/journals/jama/article-abstract/2752662

- 2 https://www.change.org/p/yelp-remove-online-reviews-of-doctors
- 3 https://www.hopkinsmedicine.org/news/media/releases/study\_suggests\_medical\_
- errors\_now\_third\_leading\_cause\_of\_death\_in\_the\_us
- 4 https://onlinelibrary.wiley.com/doi/abs/10.1111/jep.12747
- 5 https://doi.org/10.1515/dx-2019-0019

©2020 ArmadaHealth All rights reserved.