SBPC ML
Sociedade Brasileira de Patologia Clínica
Medicina Laboratorial

Sociedade Brasileira de Patologia Clínica
Medicina Laboratorial

AMB
Associação Médica Brasileira

ISQua
Membership
Advancing Patient Safety and Healthcare Quality Globally

Erros Diagnósticos:

Conceitos e impactos no cuidado de saúde

Wilson Shcolnik – Junho 2019
Presidente da Soc. Brasileira de Patologia Clínica/Medicina Laboratorial

Declaração de Conflito de Interesses

- Presidente da SBPC/ML 2018-2019
- Relações Institucionais GrupoFleury
- Diretor da Câmara Técnica da ABRAMED

2000

More commonly, errors are caused by faulty systems, processes, and conditions that lead people to make mistakes or fail to prevent them.

Types of Errors

Diagnostic
- Error or delay in diagnosis
- Failure to employ indicated tests
- Use of outmoded tests or therapy
- Failure to act on results of monitoring or testing

Treatment
- Error in the performance of an operation, procedure, or test
- Error in administering the treatment
- Error in the dose or method of using a drug
- Avoidable delay in treatment or in responding to an abnormal test
- Inappropriate (not indicated) care

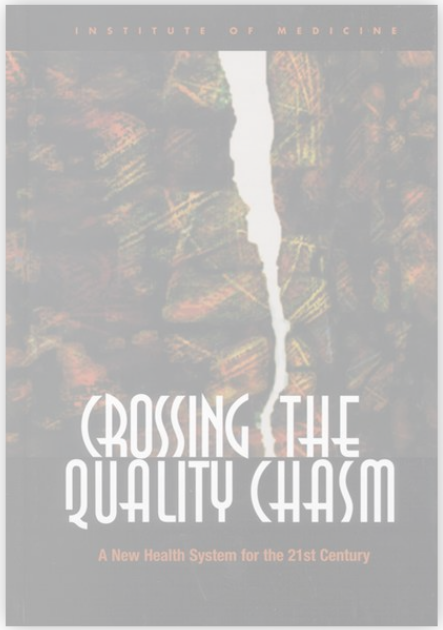
Preventive
- Failure to provide prophylactic treatment
- Inadequate monitoring or follow-up of treatment

Other
- Failure of communication
- Equipment failure
- Other system failure

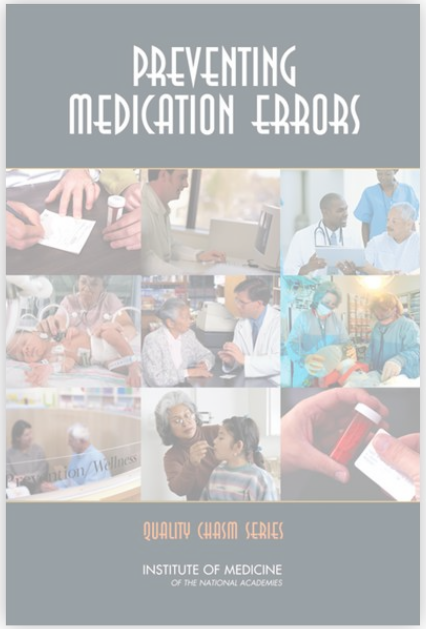
SOURCE: Leape, Lucian; Lawthers, Ann G.; Brennan, Troyen A., et al. Preventing Medical Injury. Qual Rev Bull. 19(5):144–149, 1993.

https://www.ncbi.nlm.nih.gov/books/NBK225182/

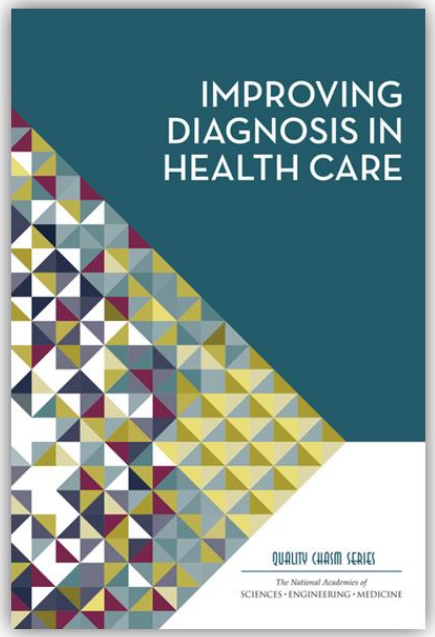
O processo diagnóstico



2001



2007



2015

ERRO DIAGNÓSTICO

- Falha em estabelecer uma ***explicação correta*** e em ***tempo oportuno*** para o problema de saúde do paciente

OU

- Falha em ***comunicar a explicação*** ao paciente ou aos seus responsáveis

The NEW ENGLAND JOURNAL of MEDICINE

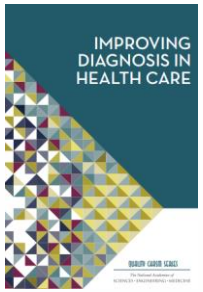
Improving Diagnosis in Health Care — The Next Imperative for Patient Safety

Hardeep Singh, M.D., M.P.H., and Mark L. Graber, M.D.

Erro diagnóstico

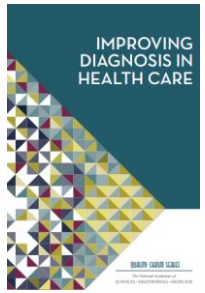
100 %

Pessoas sofrerão no mínimo 1 atraso ou erro diagnóstico ao longo da vida



http://iom.nationalacademies.org/reports/2015/improving-diagnosis-in-healthcare/~/media/8692D01186934346B153347AE46EE443.ashx

Erro diagnóstico

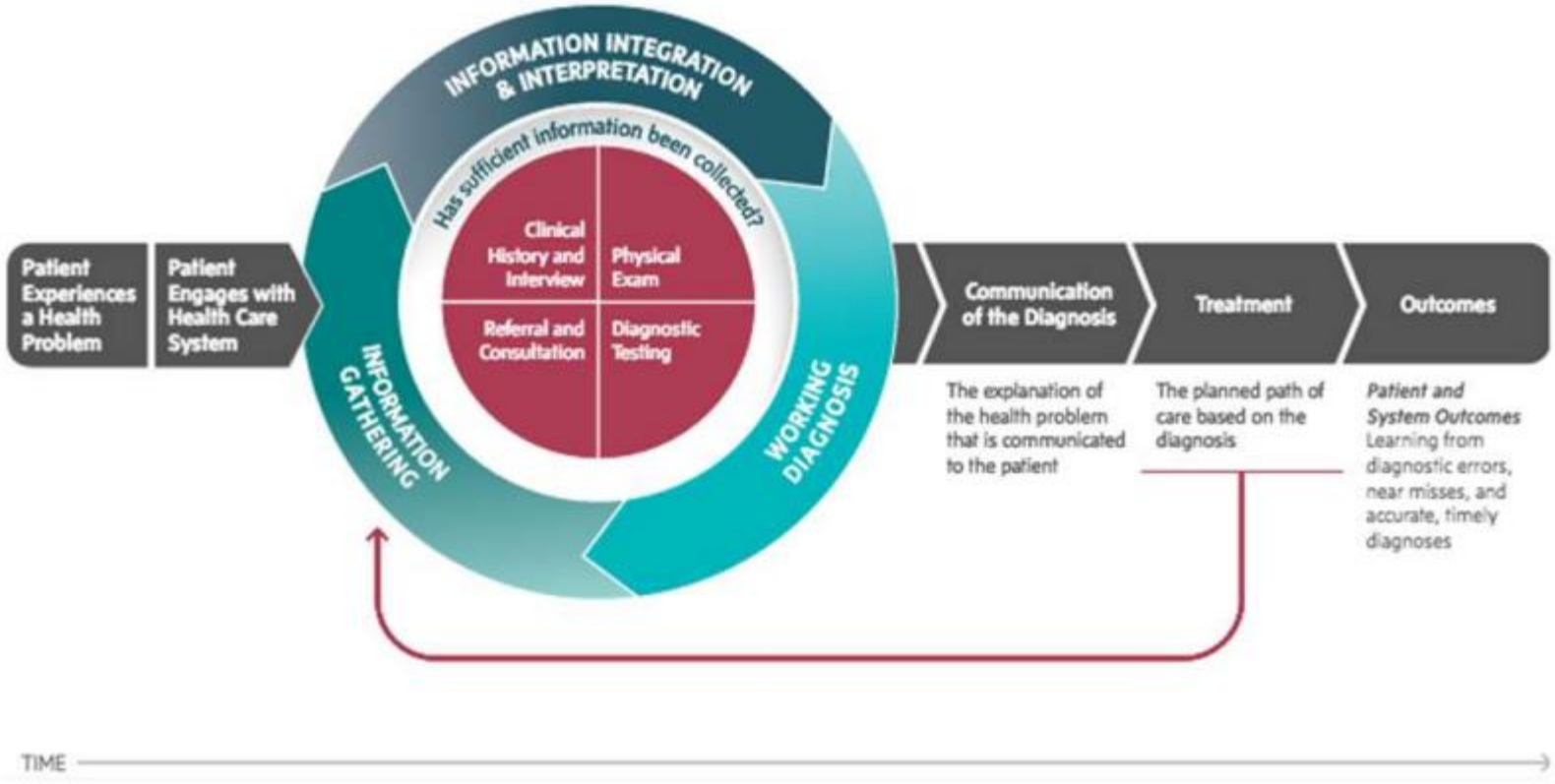


5 %	Adultos – atendidos ambulatorialmente /ano são vítimas de 1 erro diagnóstico
10 %	(estudos post-mortem) - Mortes têm contribuição de erros diagnósticos
6-17%	Eventos adversos em hospitais são causados por erros diagnósticos
LÍDER	Entre as causas de indenização por má prática nos USA

http://iom.nationalacademies.org/reports/2015/improving-diagnosis-in-healthcare/~/media/8692D01186934346B153347AE46EE443.ashx

IMPROVING DIAGNOSIS IN HEALTH CARE

The Diagnostic Process



https://wwhttps://www.improvediagnosis.org/

SOCIETY to IMPROVE DIAGNOSIS in MEDICINE

Resources For | Get Involved | Publications | Conferences | News | Initiatives | About

Diagnosis

Official Journal of the Society to Improve Diagnosis in Medicine (SIDM)

https://www.degruyter.com/view/j/dx

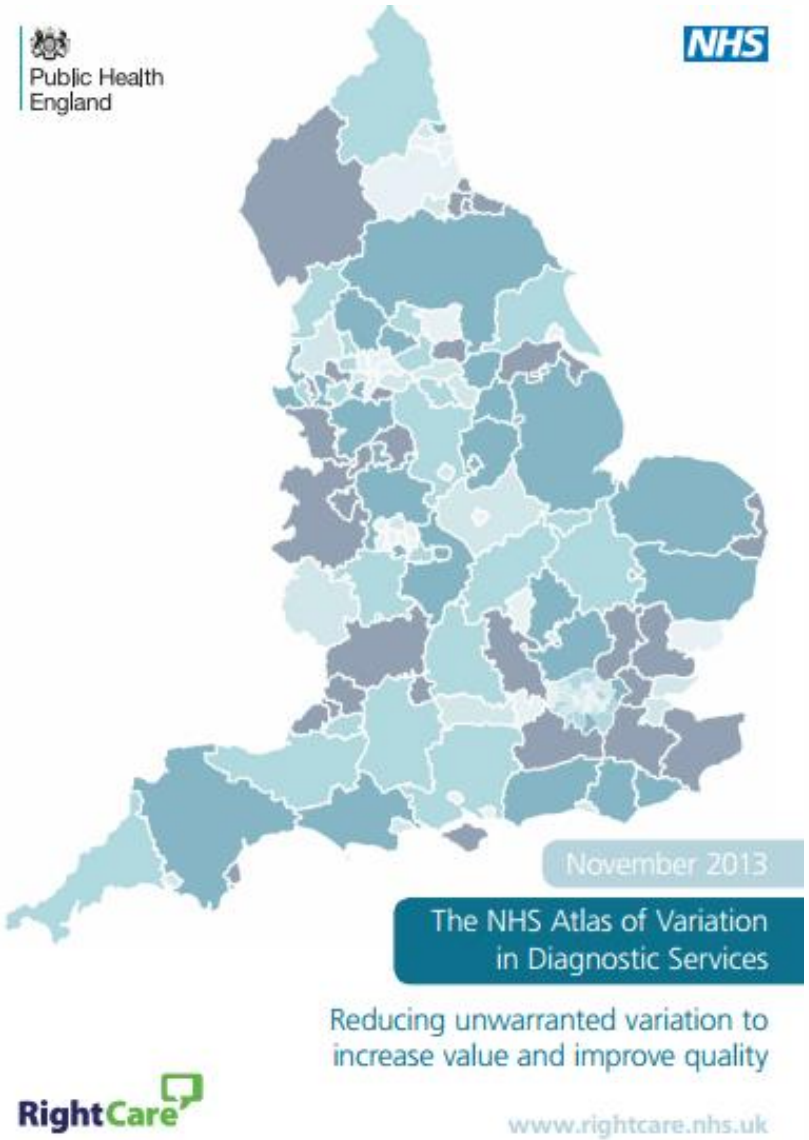
Incerteza do diagnóstico

Lekshmi Santhosh*, Calvin L. Chou and Denise M. Connor

Diagnostic uncertainty: from education to communication

- Médicos identificam e interpretam dados seletivamente
- Pacientes conseguem descrever apenas alguns sintomas
- Exames complementares possuem sensibilidade e especificidade limitadas

Diagnosis 2019; 6(2): 121–126



The NHS Atlas of Variation in Diagnostic Services

November 2013

https://ukgtn.nhs.uk/fileadmin/uploads/ukgtn/Documents/Resources/Library/Reports_Guidelines/Right_Care_Diagnostics_Atlas_2013.pdf

Annual rate of use for CA125

From 0.11 to 9.0 per 1000 practice population

→ 80-fold variation

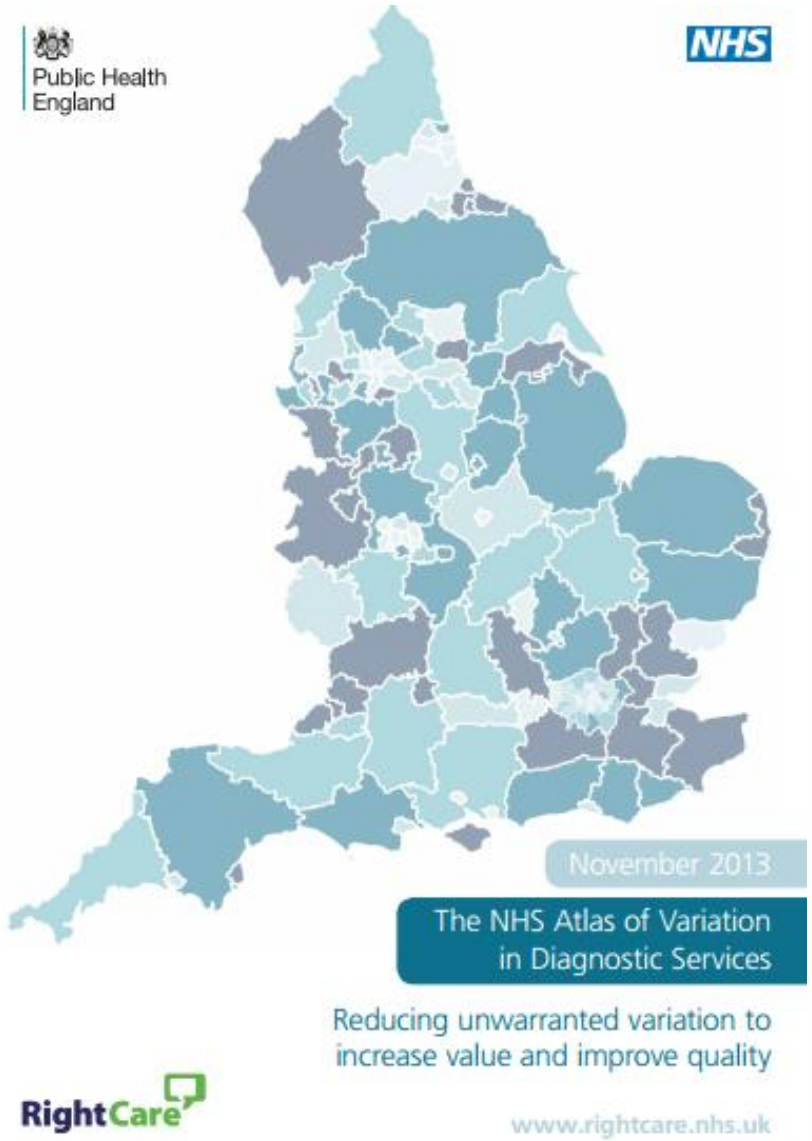
or

(after excluding 5 outliers)

from 0.92 to 8.4

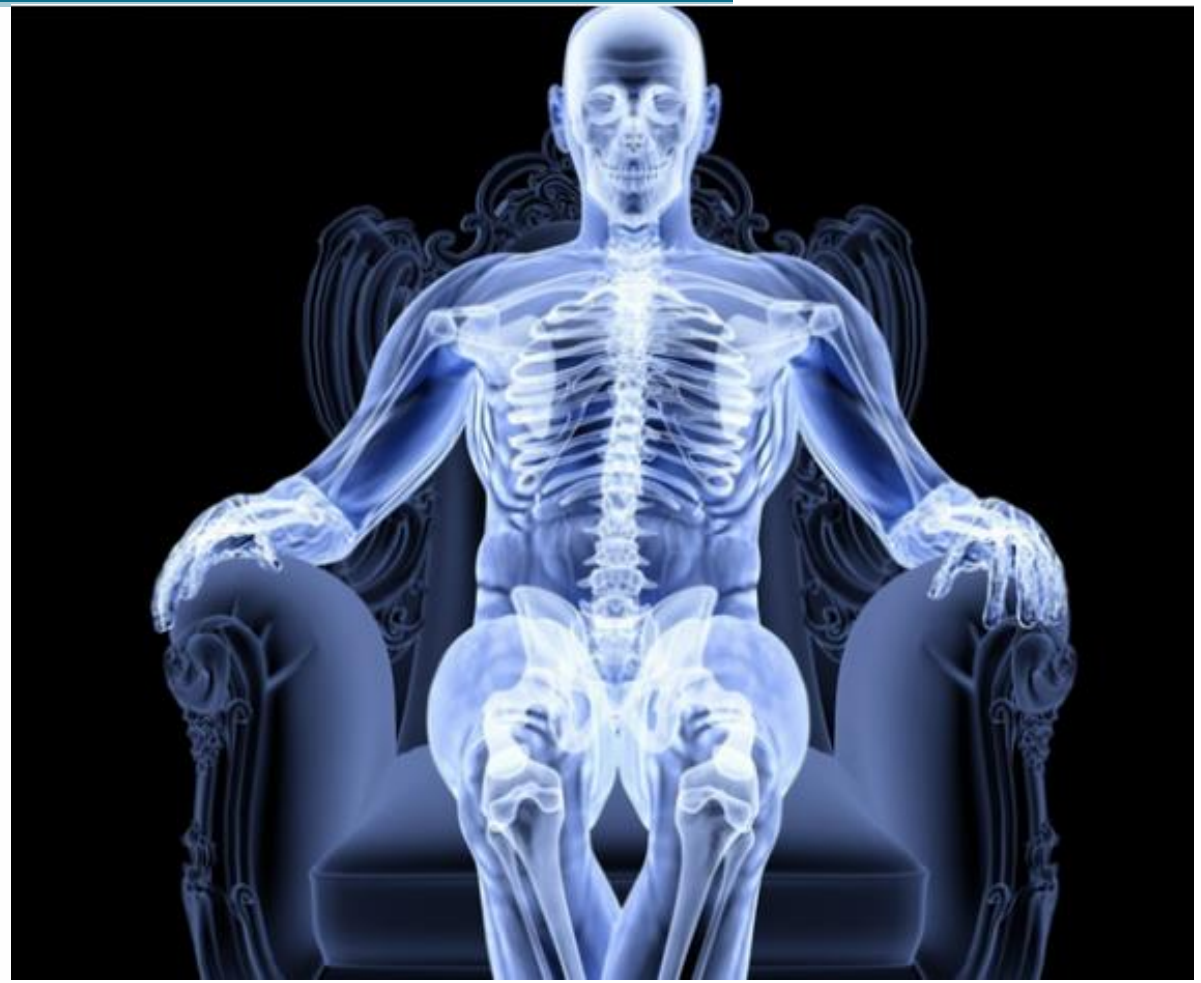
→ **9-fold variation**

NHS, 2013



The NHS Atlas of Variation in Diagnostic Services

November 2013



https://ukgtn.nhs.uk/fileadmin/uploads/ukgtn/Documents/Resources/Library/Reports_Guidelines/Right_Care_Diagnostics_Atlas_2013.pdf

The NHS Atlas of Variation in Diagnostic Services

Table S.1: Summary of indicators in the Diagnostic Services Atlas, showing the range and magnitude of variation before and after exclusions;[1] each indicator has been assigned to one or more of the following categories – activity, cost, equity, outcome, quality (performance as compared with a standard), and safety. An asterisk next to the map number denotes that there is an additional related indicator but it is presented only in the form of a column chart within the relevant commentary

Map no.	Title	Range	Fold difference	Range after exclusions	Fold difference after exclusions	Category of indicator
1	Rate of magnetic resonance imaging (MRI) activity per 1000 weighted population by PCT 2012/13	22.8–99.0	4.3	27.7–66.4	2.4	Activity
2	Rate of computed axial tomography (CT) activity per 1000 weighted population by PCT 2012/13	37.2–132.1	3.6	48.3–107.6	2.2	Activity
3	Rate of non-obstetric ultrasound activity per 1000 weighted population by PCT 2012/13	54.4–161.8	3.0	74.7–153.7	2.1	Activity
4	Rate of positron emission tomography computed tomography (PET CT) activity from independent sector treatment centres per 10,000 population by PCT 2011/12	0.6–13.8	24	0.9–13.3	14	Activity

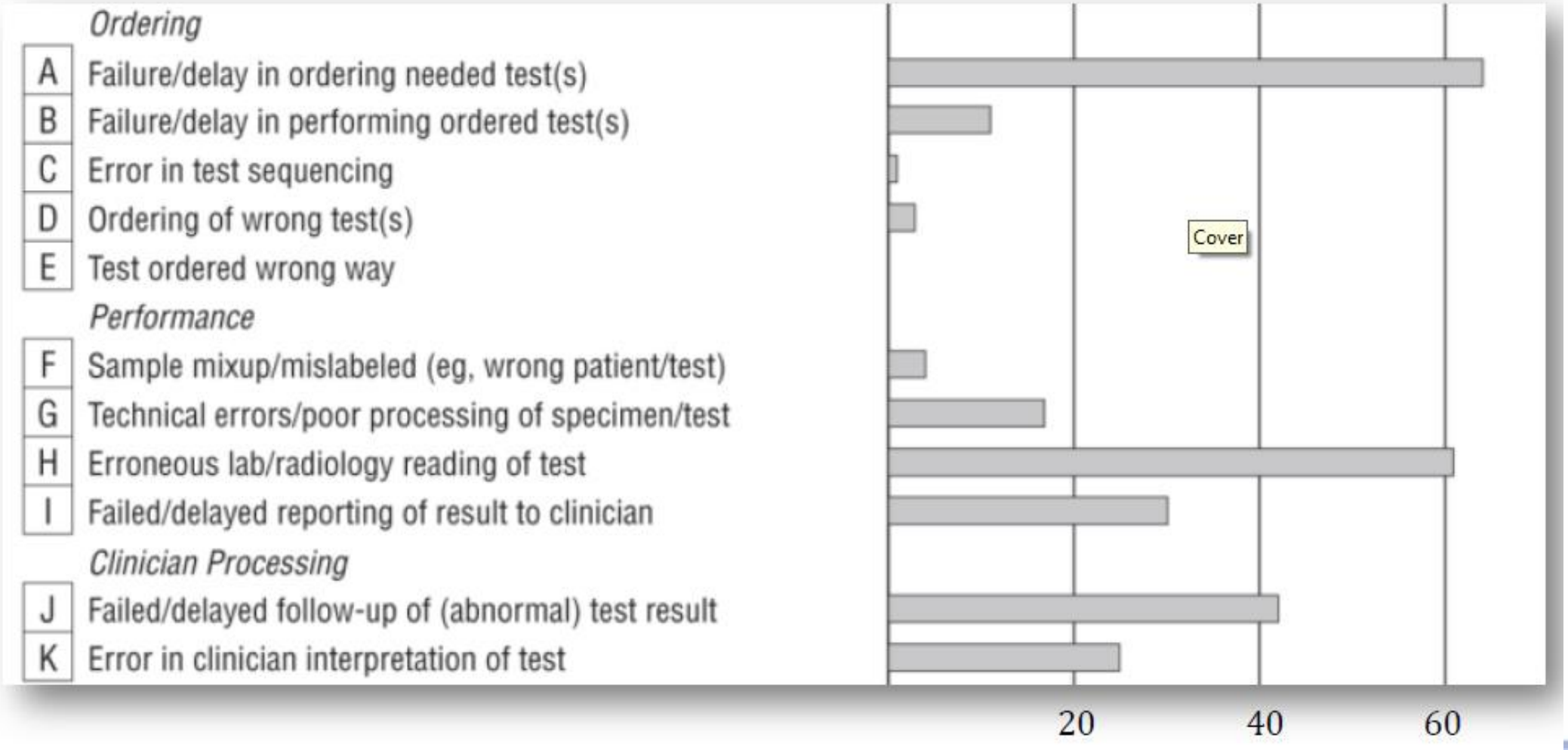
November 2013

https://ukgtn.nhs.uk/fileadmin/uploads/ukgtn/Documents/Resources/Library/Reports_Guidelines/Right_Care_Diagnostics_Atlas_2013.pdf

The JAMA Network

From: Schiff GD et al. **Diagnostic Error in Medicine: Analysis of 583 Physician-Reported Errors.** Arch Intern Med. 2009;169:1881-7.

Laboratory / radiology



DIRETRIZESAMB

Cancer de Pulmão Reabilitação

Acessar →

Dedo em Gatilho no Adulto

Acessar →

Capsulite Adesiva Tratamento Clinico e Cirurgico

Acessar →

Artrose de Ombro Quadril e Joelho Tratamento não Farmacológico

Acessar →

Artrite Reumatoide: Tratamento Medicamentoso

Artrite Reumatoide Diagnóstico

Artrite Psoriasica Manejo e Tratamento

Implante de Marcapasso nas Bradicardias

When Evidence Says No, But Doctors Say Yes

Years after research contradicts common practices, patients continue to demand them and doctors continue to deliver. The result is an epidemic of unnecessary and unhelpful treatment.

by David Epstein, ProPublica
February 22, 2017

This story was co-published with The Atlantic.

https://www.propublica.org/article/when-evidence-says-no-but-doctors-say-yes <acesso 25 fev 2017>

Why are clinical practice guidelines not followed?

Barth JH, Misra S, Aakre KM, Langlois MR, Watine J, Twomey PJ, Oosterhuis WP.

Clin Chem Lab Med. 2016 Jul 1;54(7):1133-9. doi: 10.1515/cclm-2015-0871.

IMPACTOS

- An estimated **50 million** Americans have an autoimmune disease.
- Over **75 percent** of autoimmune patients are women.
- The average autoimmune patients sees **4 doctors over 4 years** before being properly diagnosed.
- And **nearly half** report being labeled **"chronic complainers"** during their search for a diagnosis.

SOCIETY TO IMPROVE DIAGNOSIS IN MEDICINE

How Gender Bias Contributes to Diagnostic Delay and Error for Women

Maya Dusenbery

Disorders Formerly Known as Hysteria

- Fibromyalgia
- Vulvodynia
- Myalgic encephalomyelitis/chronic fatigue syndrome
- Interstitial cystitis
- Multiple chemical sensitivity
- Endometriosis
- POTS Postural orthostatic tachycardia syndrome

IMPACTOS

DE GRUYTER

Diagnosis 2019; 6(2): 173–178

Jason J. Lewis*, Carlo L. Rosen, Anne V. Grossestreuer, Edward A. Ullman and Nicole M. Dubosh

Diagnostic error, quality assurance, and medical malpractice/risk management education in emergency medicine residency training programs

Conclusions: This needs assessment demonstrated that there is a lack of dedicated educational time devoted to these topics. A more formalized and standard curricular approach with increased time allotment may enhance EM resident education about diagnostic errors, QA, and malpractice/risk management.

Inadequacies of Physical Examination as a Cause of Medical Errors and Adverse Events: A Collection of Vignettes

Abraham Verghese, MD,[a] Blake Charlton, MD,[b] Jerome P. Kassirer, MD,[c] Meghan Ramsey, MD,[a] John P.A. Ioannidis, MD, DSc[d]

Verghese A et al. A J Med. 2015. 128: 1322-4.

IMPACTOS

Jasmijn A. van Balveren*, Wilhelmine P.H.G. Verboeket-van de Venne, Lale Erdem-Eraslan, Albert J. de Graaf, Annemarieke E. Loot, Ruben E.A. Musson, Wytze P. Oosterhuis, Martin P. Schuijt, Heleen van der Sijs, Rolf J. Verheul, Holger K. de Wolf, Ron Kusters and Rein M.J. Hoedemakers, on behalf of the Dutch Society for Clinical Chemistry and Laboratory Medicine, task group 'SMILE': Signalling Medication Interactions and Laboratory test Expert system

Diagnosis 2019; 6(1): 69–71

Diagnostic error as a result of drug-laboratory test interactions

The “Big Three”

Eventos vasculares (AVC, Ataque cardíacos, embolia pulmonar)

Infecções (sepsis, meningites, apendicite),

Cancer (pulmão, colo, mama)

Os 3 representam + da metade de danos ocasionados por erros diagnósticos

Troxel DB. Diagnostic Error in Medical Practice by Specialty. The Doctor's Advocate. 2014:2,5.

Recomendações

- No processo diagnóstico, facilitar o **trabalho em equipe** entre os serviços de saúde profissionais, pacientes e suas famílias tornando-o mais eficaz
- Estimular a **educação** e a formação de profissionais de saúde como foco no processo diagnóstico
- Assegurar que as **tecnologias de informação** em saúde apoiem os pacientes, profissionais e os serviços de saúde no processo de diagnóstico
- Desenvolver e implantar **abordagens** para identificar, aprender e reduzir os erros e near misses na prática clínica
- Estabelecer um **sistema de trabalho e cultura** que apoie o processo de diagnóstico e melhorias no desempenho do diagnóstico
- Desenvolver um **ambiente propício ao reporte** e um sistema de responsabilidade médica que facilite a melhoria d diagnóstico pelo aprendizado com erros de diagnóstico e near misses
- Projetar um **ambiente de assistência e remuneração** que suporte o processo de diagnóstico
- Fornecer **financiamento dedicado à pesquisa** sobre o processo de diagnóstico e dos erros diagnósticos

O FUTURO JÁ CHEGOU !

Development and Validation of a Deep Learning Algorithm for Detection of Diabetic Retinopathy in Retinal Fundus Photographs

JAMA. 2016;316(22):2402-2410. Nat Med. 2018;24(9):1337-1341.

Diagnosis of Heart Failure With Preserved Ejection Fraction: Machine Learning of Spatiotemporal Variations in Left Ventricular Deformation

J Am Soc Echocardiogr. 2018; ahead of print. doi: 10.1016/j.echo.2018.07.013.

Andrew P.J. Olson, Geeta Singhal and Gurpreet Dhaliwal

Diagnosis education – an emerging field

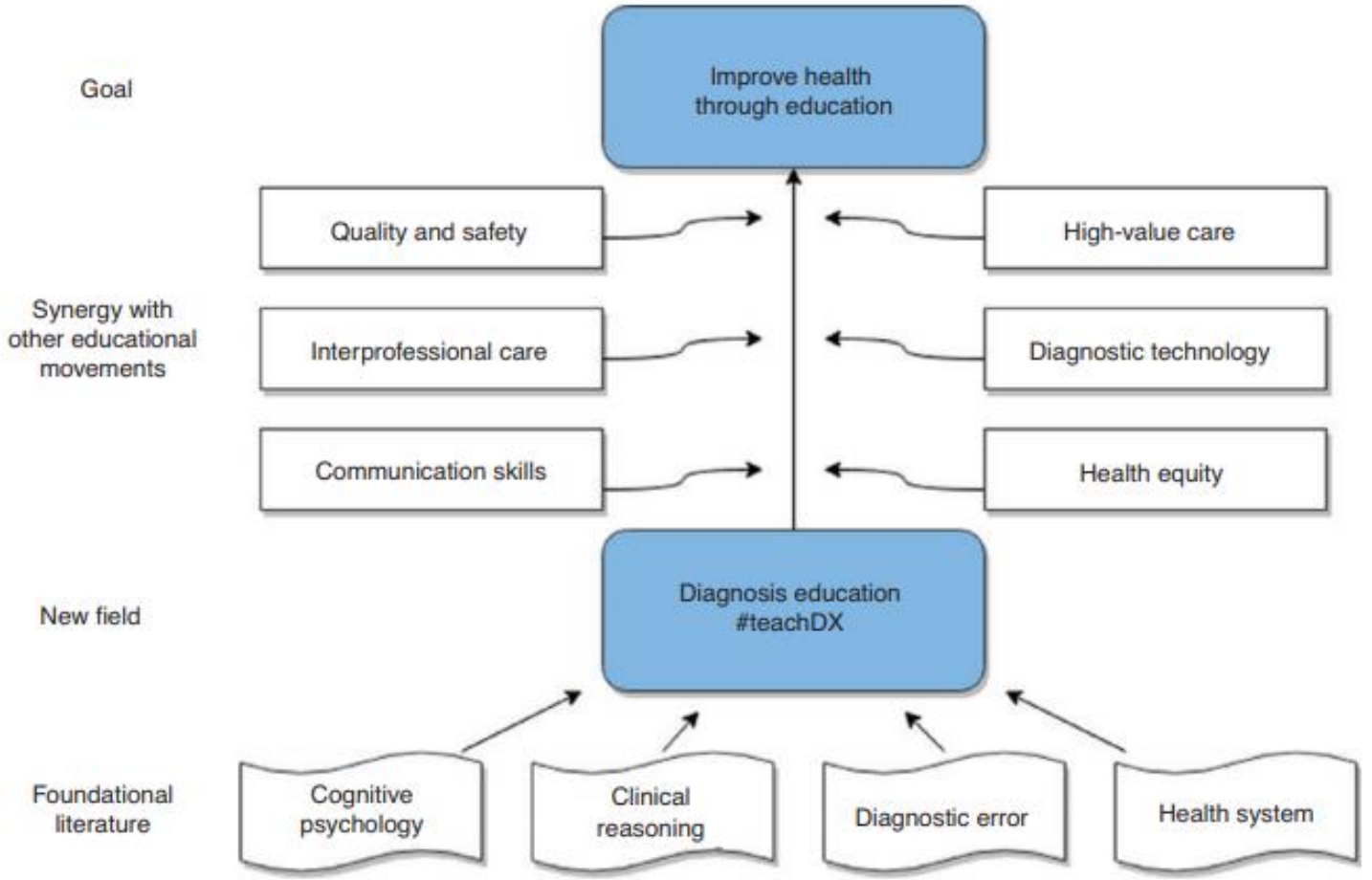


Figure 1: Diagnosis Education in the landscape of Health Professions Education – built on many areas of study, diagnosis education will be most effective in synergy with other emerging fields.

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