Communication and

LAB TESTS ONLINE UK

Your Trusted Guide

Peer Reviewed • Non-Commercial • Patient Centred

Dr Danielle B Freedman

Chair of the Board for Lab Tests Online-UK

Weqas 2018

Cardiff, UK

Key Points

- We need to improve the health of patients by increasing their understanding of laboratory tests
- Patients want to see their results – how we, as professionals, can enable them to understand the results
- To empower patients and reduce the time needed to spend with healthcare professionals
- *Improve clinicians understanding of laboratory tests !*

Global Sites

15 Country Sites in 13 Languages

In English	**στα Ελληνικά**	**Po Polsku**
www.labtestsonline.org.au	www.labtestsonline.gr	www.labtestsonline.pl
www.labtestsonline.org.uk	**Türkçe**	**Em Português**
www.labtestsonline.org	www.labtestsonline.org.tr	www.labtestsonline.org.br
En español	**v češtině**	**中文版**
www.labtestsonline.es	www.labtestsonline.cz	www.labtestsonline.org.cn
In Italiano	**In Limba Romana**	**한글**
www.labtestsonline.it	www.labtestsonline.ro	www.labtestsonline.kr
En français	**Magyarul**	
www.labtestsonline.fr	www.labtestsonline.hu	

Why do I need this blood test?

What does this laboratory result mean?

LAB TESTS ONLINE UK

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www.labtestsonline.org.uk

"Laboratory medicine empowering patients"

The Association for Clinical Biochemistry & Laboratory Medicine

Better Science, Better Testing, Better Care

IBMS Institute of Biomedical Science

The Royal College of Pathologists

Pathology: the science behind the cure

Welcome to the New Lab Tests Online-UK

The Lab Tests Online-UK website now has a new, modern design, with additional features. on the UK site and select global sites.

What's New?

Mobile-friendly design - easily accessible on a variety of mobile devices.

User-friendly layout of Test and Disease information

- View comprehensive information - all on one page.
- Use "Choose Topic" to quickly navigate to the information you want.
- Find related topic content along with appropriate images.

Streamlined navigation - access the information you want quicker and easier.

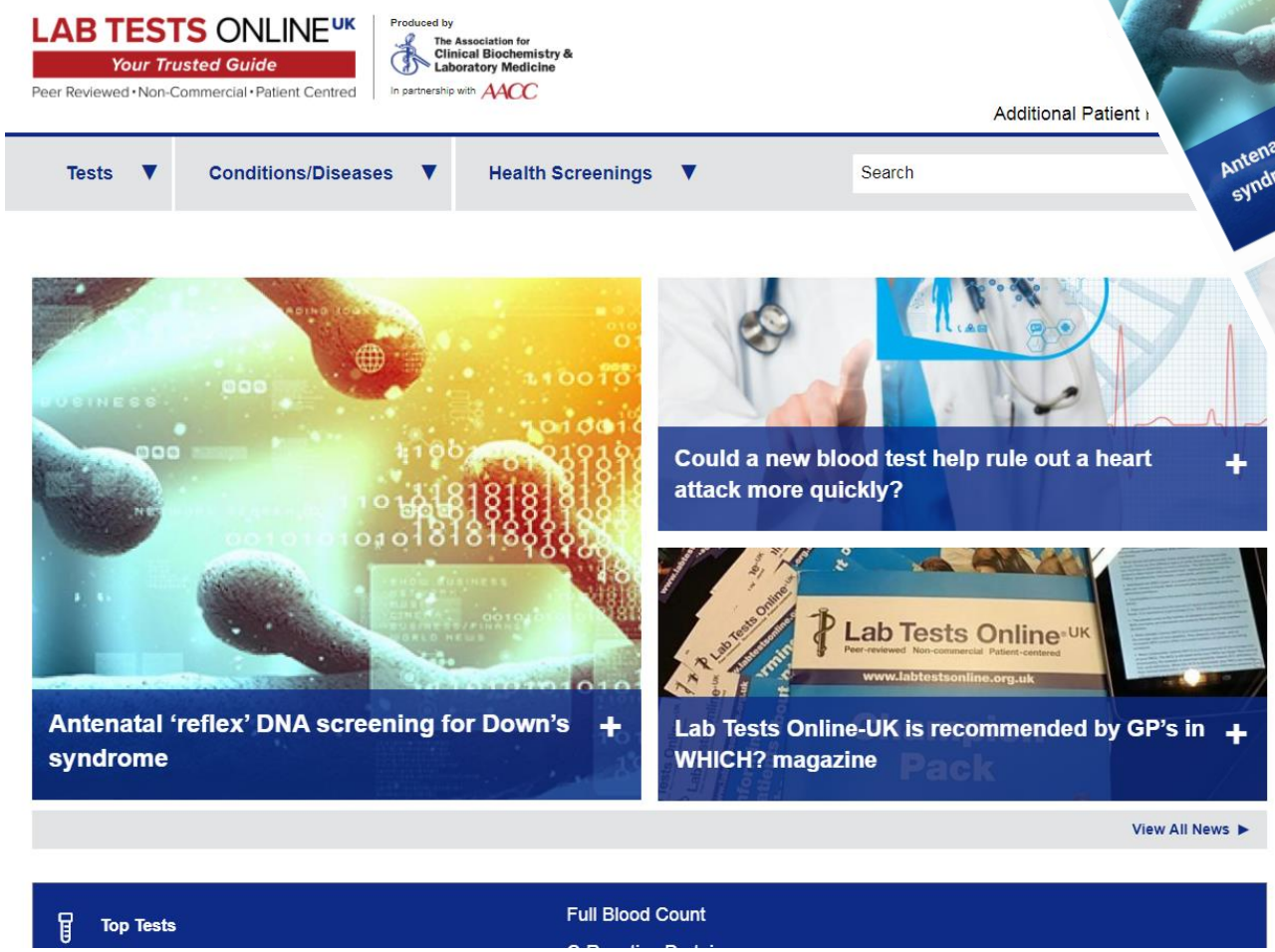
Additional Patient Resources - quickly access content and feature articles on popular lab medicine topics.

Popular Search topics - visit the Home Page to access the most popular tests and related diseases searched by users. And find out about the latest laboratory medicine news and topics of interest.

Site users will continue to see new features and improvements rolled out over the coming months.

Lab Tests Online UK has a new Website!!

- **Same information**
- **Easier to navigate**



Antenatal 'reflex' DNA screening for Down's syndrome +

Could a new blood test help rule out a heart attack more quickly? +

Lab Tests Online-UK is recommended by GP's in WHICH? magazine +

View All News ►

Top Tests

Full Blood Count

Patient Resources

Lab Tests Online-UK is designed to help you, the patient or caregiver, understand the what, why, and how of laboratory testing. To access the primary resources on this website, you can go to the full listings below:

Test Index
Conditions Index
Screenings Index
News Article Index
Glossary Index

Tests Index

1 2 3 5 A B C D E F G H I J K L M N O P Q R S
S T U V W X Z B

1

17-Hydroxyprogesterone
17-OH progesterone
17-OHP

2

24 Hour Urine Protein
25-hydroxy-vitamin D (Calcidiol); 1,25 dihydroxy-vitamin D (Calcitriol)

3

3-ANCA

5

5-HIAA
5-hydroxyindoleacetic acid

Index of Conditions

2 A B C D E F G H I J K L M N O P R S T U V W

2

21-hydroxylase Deficiency

A

Acidosis and Alkalosis
Acromegaly
Acute inflammatory demyelinating polyneuropathy
Acute Renal Failure
AKI
Allergies
Amenorrhoea
aCL Syndrome
Acute DIC
Acute Kidney Injury
Adrenal Insuficiency and Addison's Disease
Alcoholism
Alzheimer's Disease
Anaemia

Lab Tests Online-UK provides:

- Detailed descriptions of 302 laboratory tests
- Descriptions of 114 conditions and diseases, cross-referenced to the relevant tests
- News on advances in laboratory testing
- Links to other relevant and useful websites that can help answer any further questions

Top ten tests

UE

ESR

LFT

Platelet Count

CRP

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Calprotectin

RBC

Thyroid function tests

D-dimer

GGT

LAB TESTS ONLINE UK

Your Trusted Guide

Peer Reviewed • Non-Commercial • Patient Centred

Average website hits per month

158,306

To increase patient understanding of laboratory tests empowering them to become active partners in their own healthcare'

Links to Lab Tests Online-UK

(existing or working towards)

Websites:

- NHS Choices
- Microtest
- DrDoctor
- Welsh specialist virology unit
- Choosing Wisely UK
- UCLH OCS project
- Many More!!

GP systems:

- TPP(System One)
- HealthFabric
- iSOFT
- InPS
- i-Patient
- OMNI lab
- Manage your health

Some comments from users 2017/18

- Nicely presented and well written. A good educational resource for a retired GP
- As a nurse just starting to learn how to interpret blood tests ..the site is amazing…love it. Thank you.
- Very helpful to be able to see differences between one test and another. I am noting INR kidney filtration rate potassium and blood sugar levels. Thanks for info.
- Excellent and easy to understand
- Loved the sumple explanations of what the test means, what it measures and what it can be used to indicate eg high ESR and inflammation
- Brilliant & reliable. The mobile app is excellent, too.

In 2017

Who uses the website?

Patient, family member, friend	64%
Healthcare Professional	15%
Other/not specified	15%

What do they think of the website?

- Did you find what you were looking for?	Yes 63%
	No 37%
- Was it easy to find?	Yes 74%
	No 26%

Patients – would you recommend this site to your family and friends?

Yes	86%
No	14%

Healthcare professionals – would you recommend this site to a patient?

Yes	76%
No	24%

Where did you learn about Lab Tests Online-UK?

Search Engine	68%
Other website	24%
Friend/Colleague/Family Member	8%
Magazine/Newspaper	1%

Promotional Display at:

Doctor's surgery	66%
Hospital	24%
Laboratory	7%
Health Fair	3%

66% of visits are from search engines (primarily Google) with 23% from referral sites (primarily NHS Choices) and 11% from direct hits.

Which?

Sept 2017

THE HEALTH ISSUE

Help your GP to help you

With the average GP consultation lasting just 10 minutes, **Joanna Pearl** investigates how you can make the time count - and what your doctor is really thinking

AT A GLANCE

- What helps your GP to give you the best consultation
- Tips on how to communicate effectively to get better outcomes
- How using information such as your online records can help

Feeling in control of your health records

Would you like a written reminder of what your GP said at your last appointment (the typical patient remembers only about 10%)? Do you want to be able to check that referrals have been made, and see

...see your test results from the comfort of your kitchen table?

Haughton Thornley surgery near Manchester (see p21), is doing just that. She believes that every patient should be able to do the same by accessing their health records online.

In fact, 92% of surgeries across England now offer patients access to records including test results, medication and immunisations. Some, like Ingrid's, offer full access, including to consultation records and correspondence.

Ingrid has a number of health conditions and at one stage had seven consultants. If one couldn't find her notes, then she could fire up the computer and show them.

So when she was told she needed a blood test, there was no need- she had the results of the one the GP had done just a few days before

When Ingrid travels, she can access her GP medical information from anywhere with an internet

And she can find out more about her condition, monitor it and have informed conversations with her GP in 'a partnership of trust'. That, says Ingrid, is how you get the best health outcomes.

Ask at your GP surgery to try these kinds of online services yourself.

Useful websites recommended by GPs

60 years ago, you might have dusted off an encyclopedia, but for nowadays here are five trusted websites that our GPs recommend to their patients:

■ **Clinical Knowledge Summaries – cks.nice.org.uk**
How your GP reviews the current evidence on how to treat you. Technical but comprehensive.

■ **Healthtalk – healthtalk.org**
Patients are recorded talking about their conditions, from atrial fibrillation to arthritis. Great for finding out what it's really like to have a condition.

■ **Lab Tests Online – labtestsonline.org.uk**
Practising lab doctors and scientists explain your lab tests, from what to expect, to what the results mean.

■ **NHS Choices – nhs.uk**
The huge NHS website includes comprehensive health information, service directories, and reviews and ratings of health and social care services.

■ **Patient – patient.info**
Started by GPs and now part-owned by EMIS, the computer system provider for GPs, it has just the right level of detail on health and medicines.

1 of only 5 recommended websites!

"It's interpret-your-own-test-results day today."

The Association for Clinical Biochemistry & Laboratory Medicine
Better Science, Better Testing, Better Care

Journal of the Association for Clinical Biochemistry and Laboratory Medicine, edited in association with the Nederlandse Vereniging voor Klinishce Chemie en Laboratoriumgeneeskunde and the Japan Society of Clinical Chemistry

Annals of Clinical Biochemistry
International Journal of Laboratory Medicine

Availalbe online now
Vol 53. No. 6
November 2016

Editor's Choice:

A survey of Lab Tests Online-UK users: a key resource for patients to empower and help them understand their laboratory test results

R Leyland and DB Freedman

10.1177/0004563216631774

Volume: 53 issue: 6, page(s): 669-679
Article first published online: March 24, 2016;Issue published: November 1, 2016
DOI: https://doi.org/10.1177/0004563216631774

Who uses the Lab Tests Online-UK website?

- Patients, their carers and health care professionals

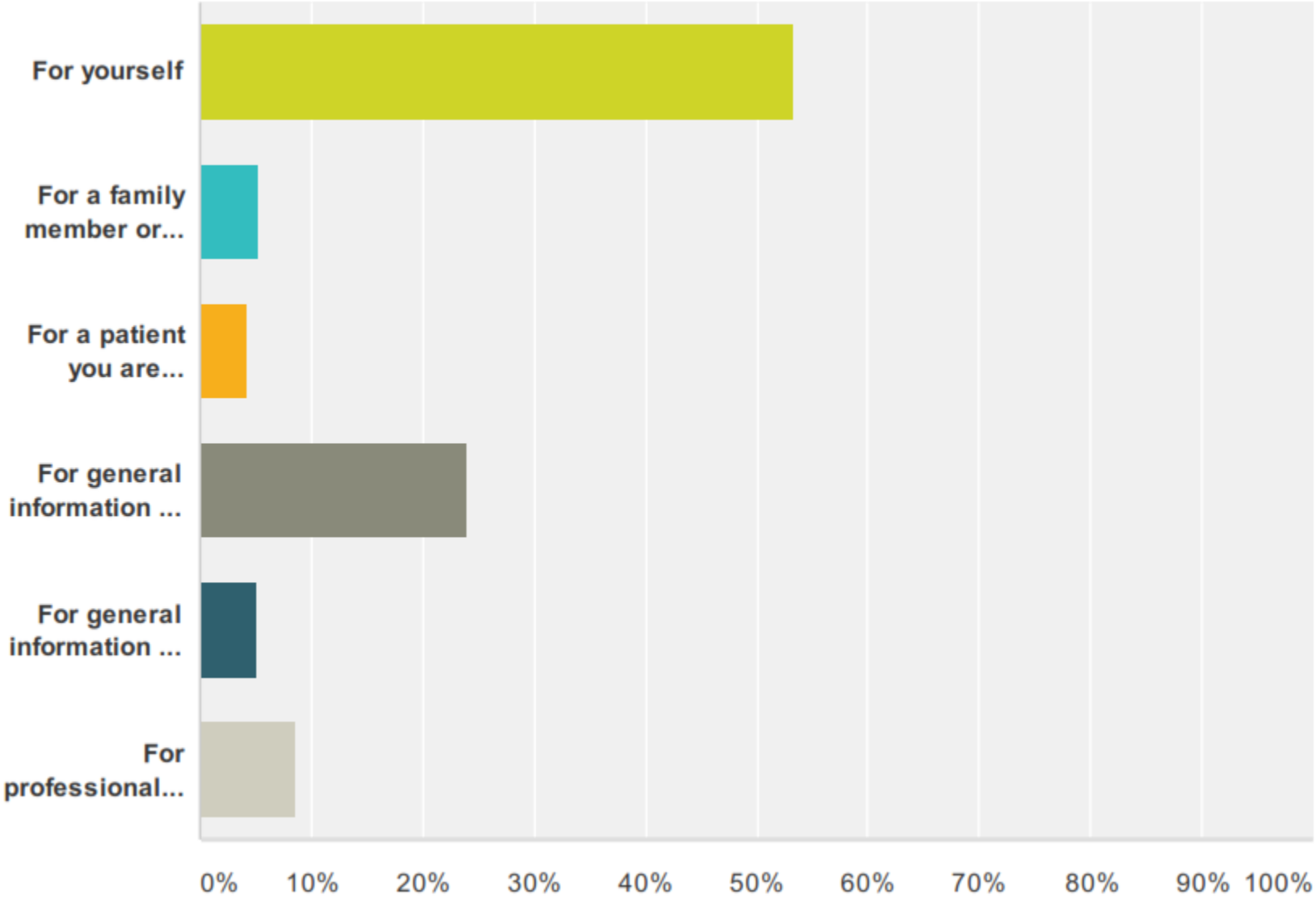
In our 2014 survey (661 responders):

- 40% of respondents were healthcare professionals
- **60% were patients or carers**

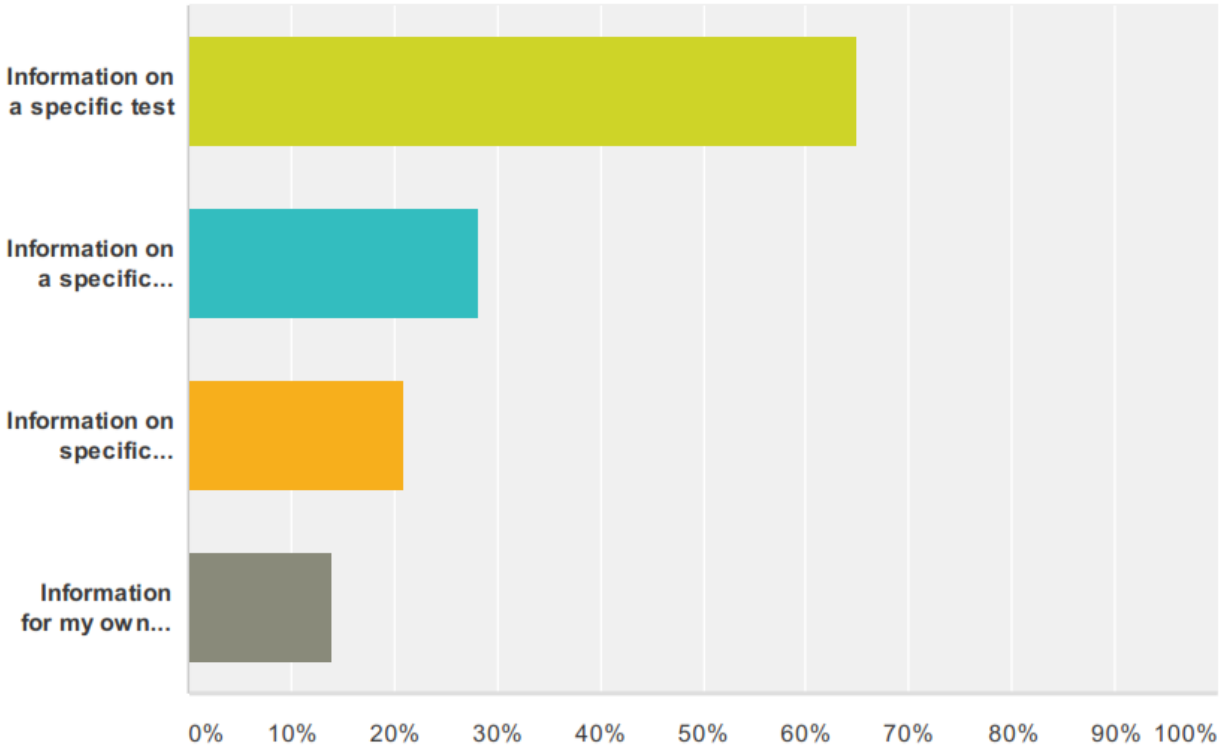
2014 Survey results
Patients and carers

- 71% found what they were looking for when visiting the website
- 71% found the information was written at the right level for them
- 93% found the information very easy or fairly easy to understand
- 87% understood their test/diagnosis/condition better after visiting our website

Q3. Which of these best describes your reason for visiting Lab Tests Online-UK?



Q 13. Which of these best describes what you are looking for today on this website?

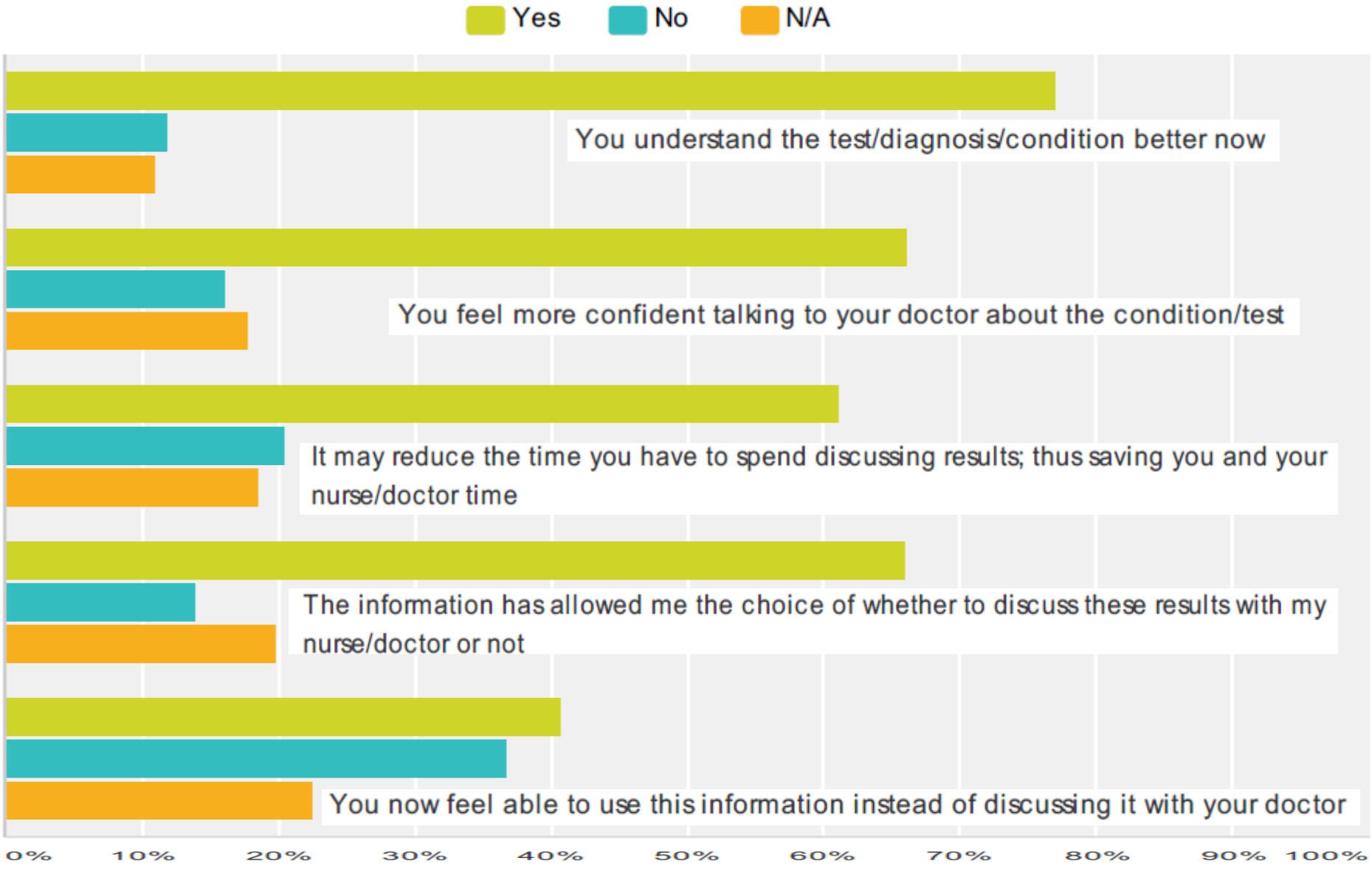


- I have been told my white blood count is low
- Doctors lack of time/complacency etc
- Trying to understand what raised white blood cells means
- My wife desires to know what poisoned her. Current doctors are monitoring her recovery but are not finding the source

Q16. You stated that you did not find what you were looking for on the website (11%) Please could you state what was missing on the site

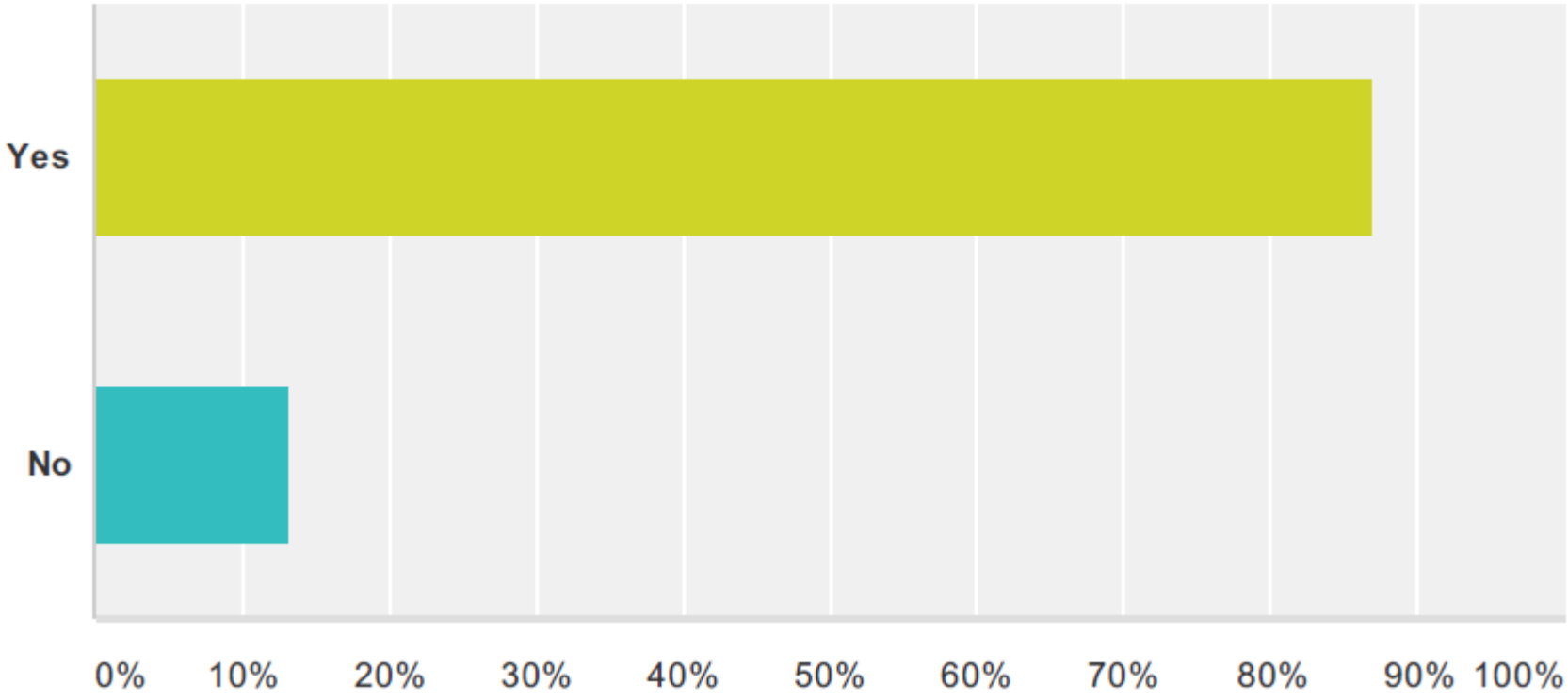
- I'm suffering from joint pain in my hands and feet and was wondering if this would be a consequence of taking statins over a period of years
- Wanted to find test results online
- Why I have high plate count
- What is a normal cholesterol
- I am suffering from a sewage leak over a year and want to test for ammonia inhalation if possible (local water board not repairing) and possibly other V.O.C.s Also any precautions or cures I need to take.
- Home testing for mercury
- Was looking to find out if HRT for menopause safe to take after radioiodine
- Testosterone cream for women

Q20 Which of these statements applies to you as a result of using this website?



Q21 Would you like to see (either by electronic access or on paper copy) your laboratory test results, at the same time as your doctor/nurse sees them?

Answered: 311 Skipped: 350



Q23. Only 4% would NOT like to see their laboratory test results, at the same time as their doctor/nurse

Please may we ask why you do not want to view your laboratory results

- They know how to interpret them, I'd just worry
- I wouldn't know what I'm looking at and it would probably make patient feel they know better than their GPs who are the experts
- Doctor can interpret the results, I can't
- Would not understand them. The consultant provides me with a copy of his letter to my GP. I therefore have info for discussion with GP

Q28. In what ways, if any, could the Lab Tests Online-UK website be improved?

Please include any comments on the websites content and navigation

- By getting GP's to understand thyroid problems
- It's v good
- Excellent, doesn't need improvement
- Very good and informative website
- Site is easy to work
- Love it
- Great website, I recommend it anyone
- Excellent resource. Would struggle to find another resource online which is as comprehensive, useful and reliable at the moment.
- Indicate where one can get tested
- **Normal range** of each test to be mentioned
- LTO-UK website is well thought out, expertly presented website. Thank you for helping me.
- Lees muddle on home page. I did not bother to read it.
- The line of it being non commercial etc needs to be more obvious, its quite small to read yet it gives really important information

Summary / Key Findings

- 661 users responded but not all surveys were completed
- Liked / Loved website – right level of information / very useful
- **Patients WANT to see their lab results and want to know what they mean**
- Professionals like the information – right level
- Large number of users from outside the UK [Asia and America]
- Editorial comments: cluttered front page / font size
- Users unaware LTOL - UK Team are working voluntarily
- App rated 4.35/5

Lab Tests Online® UK
Peer-reviewed Non-commercial Patient-centered

Patient's view of the laboratory

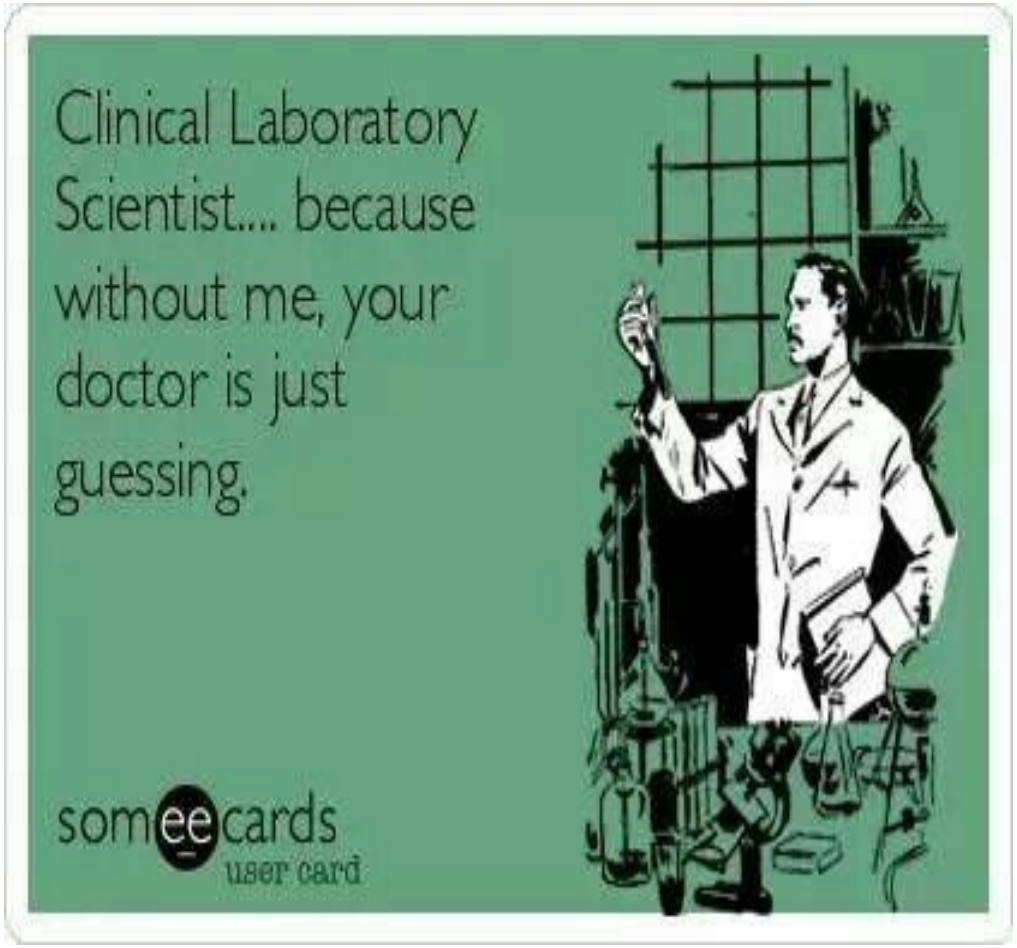
Samples in

↓

Results out

Other views of the laboratory

The reality


Clinical Laboratory Scientist.... because without me, your doctor is just guessing.
someecards
user card

Head To Head

Head to Head

Can patients use test results effectively if they have direct access?

BMJ 2015 ; 350 doi: http://dx.doi.org/10.1136/bmj.h673 (Published 11 February 2015)
Cite this as: *BMJ* 2015;350:h673

Maurice O'Kane, consultant chemical pathologist, Altnagelvin Hospital, Western Health and Social Care Trust, Londonderry, UK, Danielle Freedman, director of pathology, Luton and Dunstable University Hospital NHS Foundation Trust, Luton, UK, Brian J Zikmund-Fisher, associate professor, Department of Health Behavior and Health Education, University of Michigan, Ann Arbor, MI, USA

Correspondence to: M O'Kane Maurice.OKane@westerntrust.hscni.net, B J Zikmund-Fisher bzikmund@umich.edu

Maurice O'Kane and **Danielle Freedman** say that patients welcome direct access to test results and that they improve clinic visits, but **Brian J Zikmund-Fisher** worries that the data are currently presented in ways that make them meaningless to most patients

Yes—Maurice O'Kane and Danielle Freedman

Understanding your tests

Was this page helpful?

Search

UNDERSTANDING YOUR TESTS

COPING WITH DISCOMFORT AND ANXIETY

READING YOUR RESULTS

HOW SAMPLES ARE COLLECTED

WHY IDENTIFICATION IS IMPORTANT

TEST ACCURACY AND RELIABILITY

Having pathology tests can be a time of anxiety and uncertainty. Knowing what's ahead of you can make all the difference.

Your Role

One of the most important things in determining the accuracy and reliability of your laboratory test is you, the individual. After all, it is a sample from your body – blood, urine, or some other specimen – on which the test will be performed. Therefore, it is essential that you do the following to ensure that the results are useful:

1. Follow any instructions you are given to prepare for the specific test you are having performed.
2. Alert the person collecting your sample if you have not followed the instructions and in what way.
3. Inform your doctor of any medications (including herbal remedies, vitamins and supplements) you might be taking or aby particular foods you have eaten within the day prior to the test.

Many tests require no special preparation but for those that do, be certain to keep to the instructions given. If you are unclear about the instructions be sure to ask your doctor for clarification.

Some of the more common types of preparation required for testing include fasting (going without all or certain foods) for

Coping with discomfort and anxiety

Was this page helpful?

UNDERSTANDING YOUR TESTS

COPING WITH DISCOMFORT AND ANXIETY

READING YOUR RESULTS

HOW SAMPLES ARE COLLECTED

WHY IDENTIFICATION IS IMPORTANT

TEST ACCURACY AND RELIABILITY

If undergoing pathology tests makes you or someone you care for anxious, embarrassed, or even difficult to manage here are some general tips on how to make the experience less stressful.

Know what to expect

Sometimes, undergoing an unfamiliar pathology procedure can turn out to be a tense, upsetting, or even frightening experience but with a little preparation you can help ensure that your test is as quick, painless, and accurate as possible. Emotional distress is more likely when your experience with a procedure does not match your expectations or you (or someone you know) have had a bad experience. Knowing what will happen is a good way to reduce this.

The pathology tests you are being asked to have are important in managing your health. Understanding why a test is being performed and how it helps your doctors can improve your attitude and preparation for the test. Being well prepared also helps you feel more relaxed and in control of the situation. Ask your doctor to explain the reasons for your test and how the test will be conducted. The information you will find under Tests and Conditions/Diseases on this website will also give you useful background information.

Lab Tests Online AU
EXPLAINING PATHOLOGY

Reading your results

….reading the results can be confusing. Understanding what is normal and what is abnormal can be a little daunting.

Who prepares your test results report?

The pathology report is a medical document produced by the pathology practice. All pathology reports contains certain compulsory information that is essential for interpreting your results. Individual pathology laboratories often add their own information and they can vary in the way they present it.

Your tests will have been performed by scientists and/or pathologists. The pathologist-in-charge who is a medical doctor who specialises in interpreting test results and observing and evaluating biological changes to make a diagnosis, will be responsible for your report. The pathologist is available to discuss your results with your doctor.

All that is red is not always abnormal

If in doubt, talk to your doctor as results need to be interpreted in the context of all the other information available.

LabTests ONLINE UK

‘Better do a *few* lab tests…’

‘I could give you a copy of your lab report but…

…I doubt you’d understand it.’

Language confusing

FBC

LFT

TFT

IgE

Patient perspectives on test result communication in Primary care

Lichfield et al, BJGP, 1 Mar 2015

- Qualitative study 10 practices in Birmingham
- Focus groups of patients
- Pts preferred to receive results from Clinical staff, NOT receptionists !
- Frequent delays and inconsistency of:

  level of information

  method of communication

  clear protocol

Feedback from a patient with leukaemia using the LTO-UK website

Sept 2016

I cannot find the right words to express **my satisfaction with Lab Tests Online**, particularly as the pages are **embedded into my SystmOne** Patient Online records. Being able to access test results without delays, being able to **access information about each test**, range information and other key details is **absolutely wonderful**……

She is now a patient LTO-UK Champion!

Haughton Thornley Medical Centres

"There for you all your life, your good health with our support, empowering you to live well"

MAIN WEBSITE

Haughton Vale PPG | Thornley House PPG | Search | Staff

Google™ Custom Search | Search

powered by Google™

We are welcoming new patients. Please click here to join us now!

Haughton Vale Surgery
0161-336-3005
Thornley House Medical Centre
0161-367-7910
Out of Hours - GoToDoc
0161-336-5958

Latest News

NEW: Check if you are eligible for the flu injection. Dates for flu clinics out now! Read the Review of 2014 and what we need to do
See the launch of Health Pledge 2015 At Clarendon Shopping Centre and Make a Health Pledge today! Donate to food bank
URGENT: Learn about care.data and whether you and your family wish to opt out of sharing your data with 3rd parties without your consent

Online Services emis

- LOGIN to your record
- NHS Choices
- Patient.co.uk
- Lab Tests Online
- NHS Direct Symptom Checker
- Recording Your Own Data
- Common Problems You Can Solve
- Health Pledge

Getting Started Online

- Learn about online services
- REGISTER now
- Forgot your password?

Welcome to our new Home Page which has been compacted to provide you with the most essential information for most of your needs as a patient.

The main website offers a great deal more information for those who wish to learn more about what they can do for themselves supported by a large number of resources we have gathered to support you and your family's needs.

If you or your loved ones would like to sign up for FREE online services then please click here.

You can send secure non-urgent messages online via EMIS Access or send an email about non-medical matters to htmcpatient@nhs.net

Common Problems | Patient Opinion | Appointment system | Health Pledge

Main Home | Haughton Vale Medical Centre | Thornley House Medical Centre | Tameside and Glossop CCG | Health information in other languages | Terms and Conditions

Access to medical records

Understanding your test results

www.htmc.co.uk

Thanks to Dr.Amir Hannan

PROUD
CORRECT SHARPS DISPOSAL
LAB TESTS ONLINE
ESR
Welch Allyn

LAB TESTS ONLINE UK

Your Trusted Guide

Peer Reviewed • Non-Commercial • Patient Centred

Your Record (Page 1/2)

Show events between 01/06/2009

and 01/12/2010

Recorded by All clinicians Go

Previous 1 2 Next

30 Nov 2010	Dr Drew Littler (GP Partner)	The Real Surgery (General Practice)
Parvovirus serology Report, Normal, No Further Action (Patient Informed)		i
Parvovirus B19 IgG level - Not detected Information about this test		i
Parvovirus B19 IgM level - Not detected Information about this test		i
04 Aug 2010	Dr Gp Admin (General Medical Practitioner)	The Real Surgery (General Practice)
Paracetamol 500mg / Dihydrocodeine 30mg tablets - 10 tablets - take 1 or 2 every 4-6 hrs		i
04 Aug 2010	Dr Gp Admin (General Medical Practitioner)	The Real Surgery (General Practice)
Paracetamol 650mg oral powder sachets - 8 sachets - use As directed		i
03 Aug 2010	Mr Michael France ('Other' Community Health Service)	The Real Surgery (General Practice)
Clinic Letter to unknown recipient		i
25 Mar 2010	Dr Sara Hollis ('Other' Community Health Service)	The Real Surgery (General Practice)
Restless sleep		i
Transurethral prostatectomy		i
Endoscopic resection of prostate using an electrotome		i

Guest blog: How giving patients access to health records can transform care - a GP's perspective

Understanding Patient Data

5th March 2018

- Patients at Haughton Thornley Medical Centres (HTMC) have been able to view their full GP electronic health record and **gain a better understanding of their care for over 14 years.**
- Currently **63% of all our patients** have signed up.
- Patients are **encouraged to go online and see their blood test results**, using ***Lab Tests Online-UK*** **to understand what they mean.** And not have to book another appointment.
- Patients/carers are asked if they would like access to their full GP electronic health record as part of their care. **This leads to *shared decision making*.**
- Consultations are already changing from reading off the screen to spending more time planning for the future and **gaining a shared understanding.**
- **Encouraging patients to be better prepared** at sharing their data with others and more importantly **share the knowledge gained**.

5 MAR 2018 https://understandingpatientdata.org.uk/

Understanding Patient Data

Guest blog: How giving patients access to health records can transform care - a GP's perspective

5th Mar 2018

Dr Amir Hannan, GP

*…A patient is **encouraged to go online** and see their blood test results, using Lab Tests Online to **understand what they** mean, as soon as they are available. And **not have to book another appointment just to find out it's normal…***

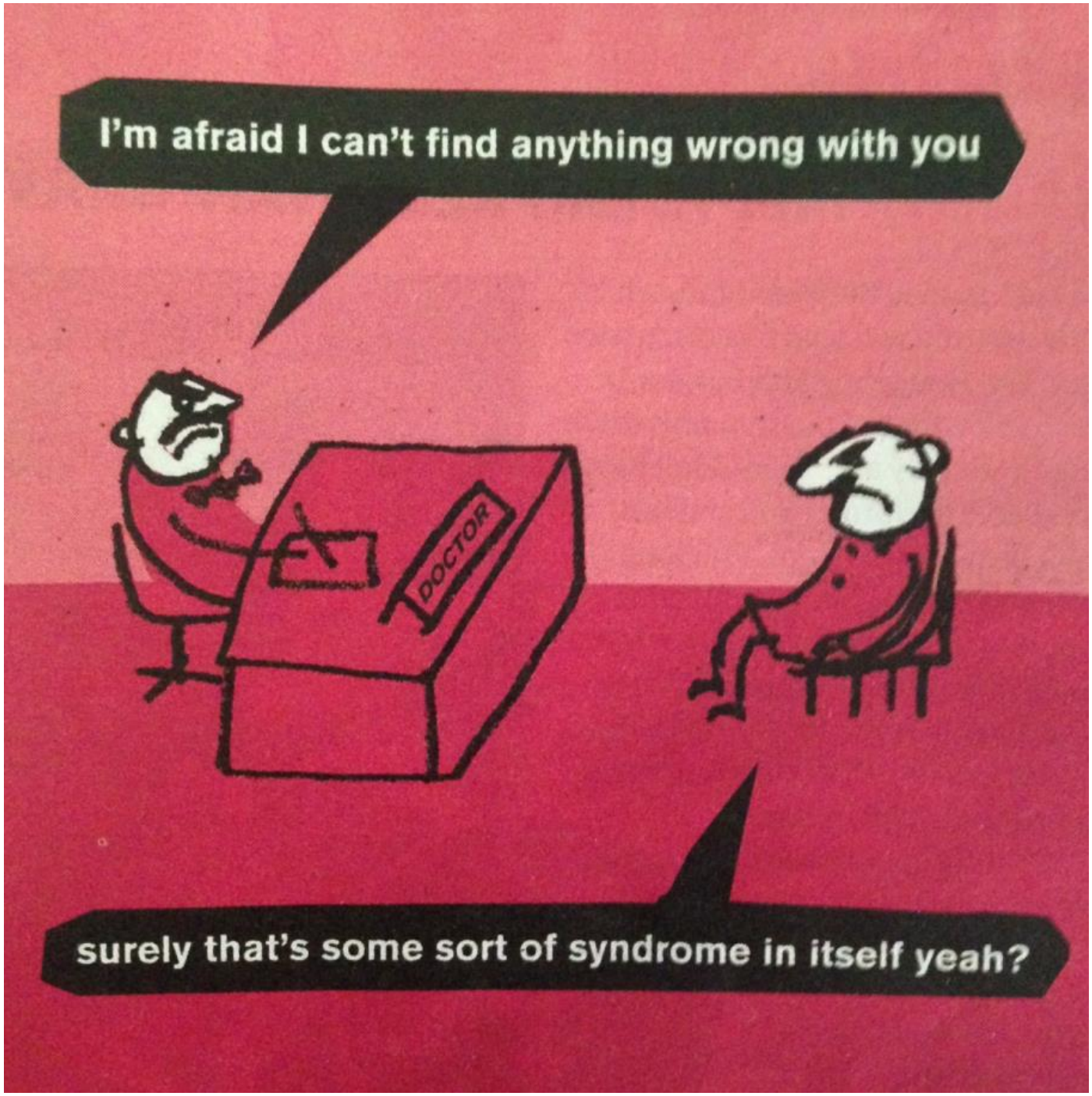
*…Our patients, and their carers, are **asked if they would like access to their full GP electronic health record** as part of their care. This leads to **shared decision making**…. They can become **active partners in their care**…*

Patients' comments

...I have regular blood tests to monitor my medications. Checking online is an easy routine. The results are easy to understand with a link to "Lab Tests Online-UK" for further clarification...

...I can discuss the test results with the clinicians in the hospital departments who are involved in my prescribing so they have no need to repeat the tests...

...If I was waiting for some new results which may be upsetting or difficult to deal with on my own then I don't have to look. I can wait until I can discuss it with the support of the doctor...


I'm afraid I can't find anything wrong with you
DOCTOR
surely that's some sort of syndrome in itself yeah?

TIP The International Post MAGAZINE

Online Self Diagnosis: Are You A "Cyberchondriac"?

Search engines can provide misleading information.

A report written in 2013 has revealed that an American spends on average an hour a week searching the internet for health information.

Self diagnosis can lead to unnecessary anxiety.

It's tempting to do your own research but leave it to the professionals.

However, if you really can't resist doing your own research, try these websites:

Patient.co.uk – this site is run by doctors where you can read leaflets on the condition and even seek medical support.

NHS Direct – This can help you narrow down the cause of your condition via a series of symptom checkers. You can also be referred to a GP

Lab tests online UK- This is written by practising lab doctors and scientists. This site can help you better understand the causes of medical conditions and the potential tests you could receive with a professional diagnosis. This site is also available as an app for smartphones.

The Problems

- Too many tests
- Different names
- Different units
- Different reference intervals
- Different alert limits
- Inconsistent guidelines

Investigations

Fasting ☐

- ☑ Serum Glucose
- ☑ HbA1C

- ☑ HDL Cholesterol
- ☑ Cholesterol/Trig
- ☑ U & E Creatinine
- ☑ Liver Function
- ☑ Bone
- ☑ CK
- ☑ CRP
- ☑ Amylase
- ☑ TFT On Treatment
- ☑ TFT Not on Treatment
- ☑ Prostate Specific Ag (PSA)
- ☑ Uric Acid
- ☑ Magnesium
- ☑ γ Glutamyl Transferase
- ☑ Lithium
- ☑ Iron and IBC
- ☑ Ferritin
- ☑ Vitamin B12
- ☑ Folate
- ☑ IgG, A & M,

- ☑ Thyroid Antibodies
- ☑ Beta - 2 - microglobulin
- ☑ Alpha - 1 - Antitrypsin
- ☑ Complement C3/C4
- ☑ C1 esterase inhibitor
- ☑ Rheumatoid Factor
- ☑ IgE
- ☑ Specific IgE (RAST)
  (Specify Allergens below)

- ☑ Coeliac Screen (TTG)
- ☑ Antinuclear Antibodies
- ☑ dsDNA antibodies screen
- ☑ ENA antibody screen
- ☑ Anti-cardiolipin abs
- ☑ ANCA
- ☑ Hib/Tetanus/Pneumo Abs
- ☑ Lymph subsets **(Specify below)** ✓

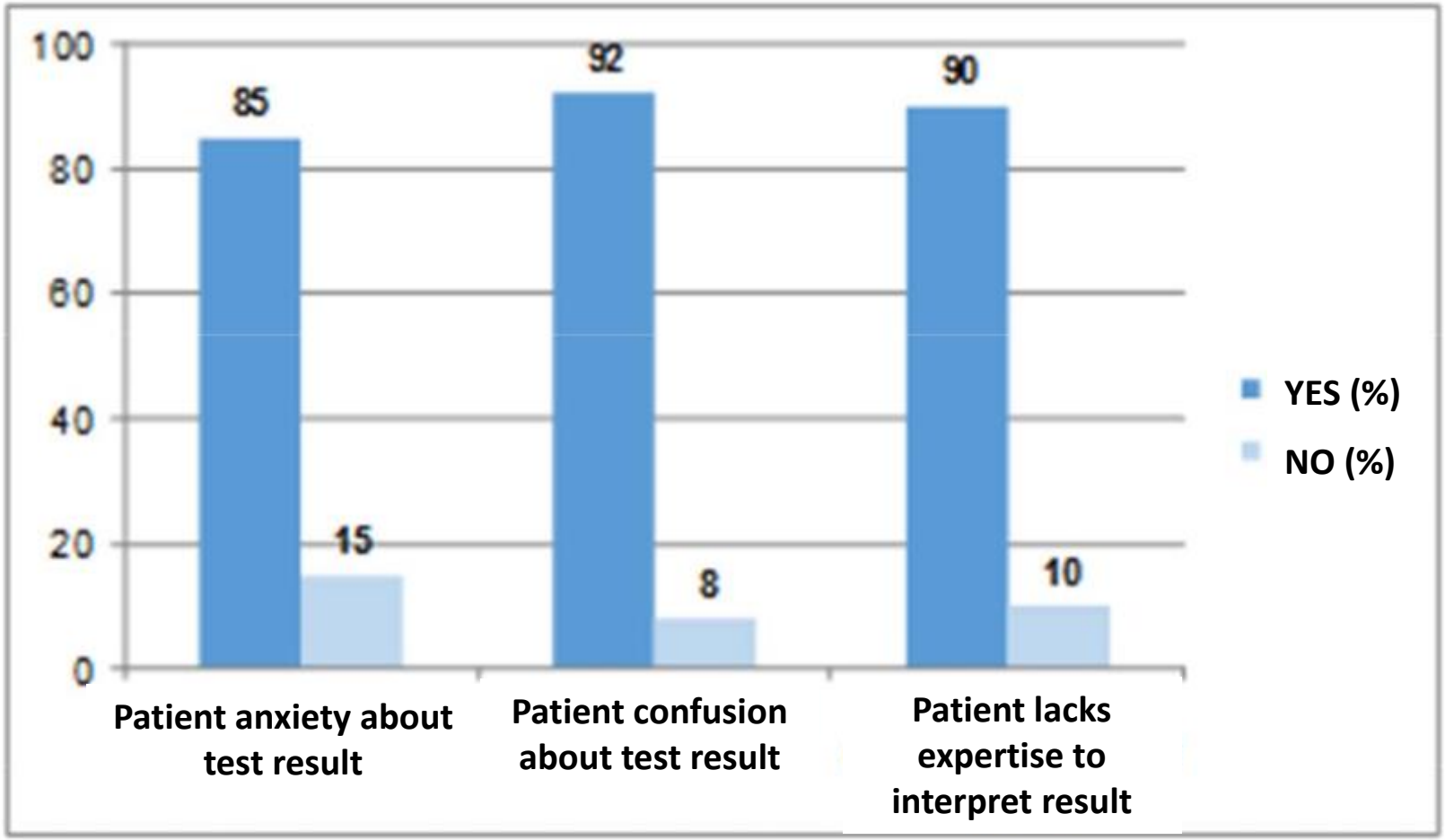
- ☑ [illegible]
- ☑ [illegible]
- ☑ [illegible] **(State Country Visited)**
- ☑ [illegible]
- ☑ [illegible]
- ☑ [illegible]
- ☑ [illegible]

Physicians perspective of releasing results direct to patients

Giardina et al, Patient Educ Couns, 2015 Feb 23

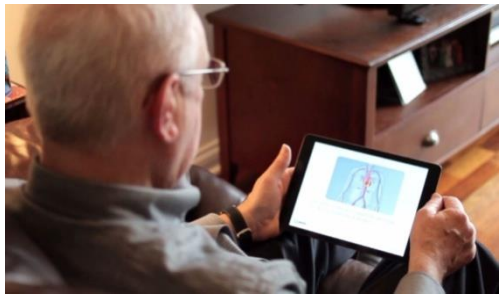
- US and Australia survey of GPs and Hospital Physicians
- 65.3% felt pts should be notified directly of normal results
- But 21.3% were comfortable with direct notification of abnormal results

Main concerns regarding direct notification of results to patients



Callen J et al, *J Med Internet Res* 2015: 17 (3) e60

Evidence about the use of patient portals



- Insufficient evidence about whether patient portals had a positive, negative or neutral impact (Goldzweig et al. Ann Intern Med 2013)
- Positive examples related to patients with chronic diseases eg diabetes and hypertension
- Very few studies have evaluated key performance indicators such as re-admissions, hospitalisations, length of stay
- We have only just begun to engage and understand this technology its effect on care delivery, outcomes and patient engagement

Callen J et al, *J Med Internet Res* 2015: 17 (3) e60

Patients Need Help Understanding Test Results from Online Health Records

February 8, 2018

BOARD APPROVED

This article was **last reviewed** on February 8, 2018. This article was **last modified** on February 8, 2018.

Online portals for laboratory test results offer a convenient way for patients to access their health information, and studies have shown that patients value that access. However, a recent study from Baylor College of Medicine, funded by the Agency for Health Care Research and Quality (AHRQ), shows

Baylor College of Medicine

Study: patients need help understanding online test results

Baylor College of Medicine › Baylor College of Medicine News › Healthcare › Study: patients need help understanding online test results

Julia Bernstein Dec 2017

- Patients increasingly use online portals to access their test results
- But do they really understand what the results mean for their health and what steps they should take next?
- Researchers from Baylor College of Medicine conducted a study to explore patients' experiences and preferences when accessing their test results delivered to them via online portals.

Patient perceptions of receiving test results via online portals: a mixed-methods study. Traber D et al. *Journal of the American Medical Informatics Association*, 12 December 2017

Baylor College of Medicine

Study: patients need help understanding online test results

Baylor College of Medicine › Baylor College of Medicine News › Healthcare › Study: patients need help understanding online test results

Results

- 25% who received a normal test result experienced negative emotions, such as anxiety, similar to those who received abnormal test results via the portals

- 50% of the participants *searched online* to figure out what their test result meant both in terms of the language and what it meant for their health. Thus, *materials that have been vetted by their physician or the healthcare system might provide patients with best resources.*

- Based on study data, researchers created a *framework for practice* and *policy recommendations* that can help guide the way the portals are developed and used.

Patient perceptions of receiving test results via online portals: a mixed-methods study. Traber D et al.
Journal of the American Medical Informatics Association, 12 December 2017

Baylor College of Medicine

Study: patients need help understanding online test results

Baylor College of Medicine › Baylor College of Medicine News › Healthcare › Study: patients need help understanding online test results

Lab Tests Online-UK already fulfils a number of the recommendations

- Ensure the portal is available on both *large-format computers and hand-held devices*.
- Provide patients with *easy access to high-quality educational* websites.
- Provide patients with *access to an explanation of test results* directly from results screen.
- Provide personalised or *contextual information* to help patients know what to do in light of the results.

Patient perceptions of receiving test results via online portals: a mixed-methods study. Traber D et al. *Journal of the American Medical Informatics Association*, 12 December 2017

Direct Release of Test Results to Patients Increases Patient Engagement and Utilization of Care

- 80% of all patient portal users viewed test results
- 82.7% noted test results to be a very useful feature
- Feel they should have direct access to test results
- Identified the ability to monitor results over time and prepare prior to communicating with a provider as benefits
- patient portal access to test results was highly valued by patients and appeared to increase patient engagement.
- *"The more informed you are, the better you can handle and control your illnesses and diseases."*

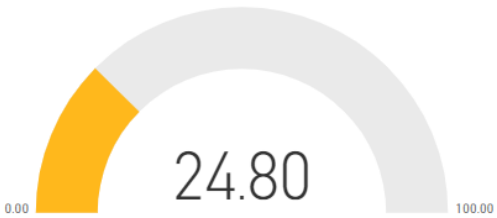
Pillemer F, Price RA, Paone S, Martich GD, Albert S, Haidari L, et al. (2016) Direct Release of Test Results to Patients Increases Patient Engagement and Utilization of Care.

Patient access to online services

All GP practices in England, data from June 2018

Online appointment booking/cancelling:

The percentage of patients registered to book/cancel appointments online:

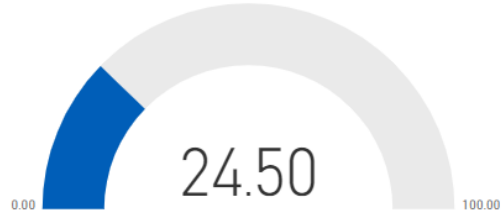


Number of transactions this month:

980K

Online repeat prescription ordering:

The percentage of patients registered to order repeat prescriptions online:

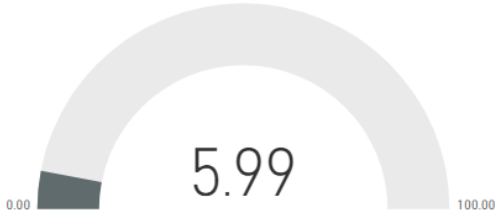


Number of transactions this month:

3M

Online detailed coded record view:

The percentage of patients registered to view detailed coded records online:



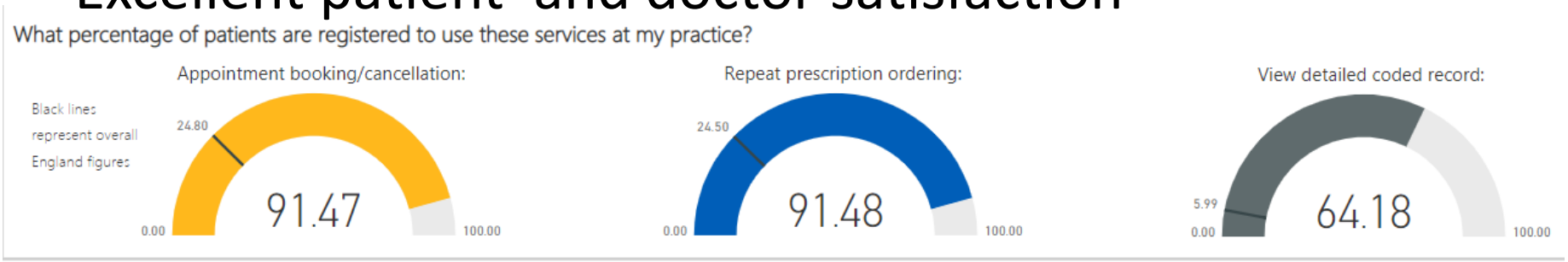
Number of transactions this month:

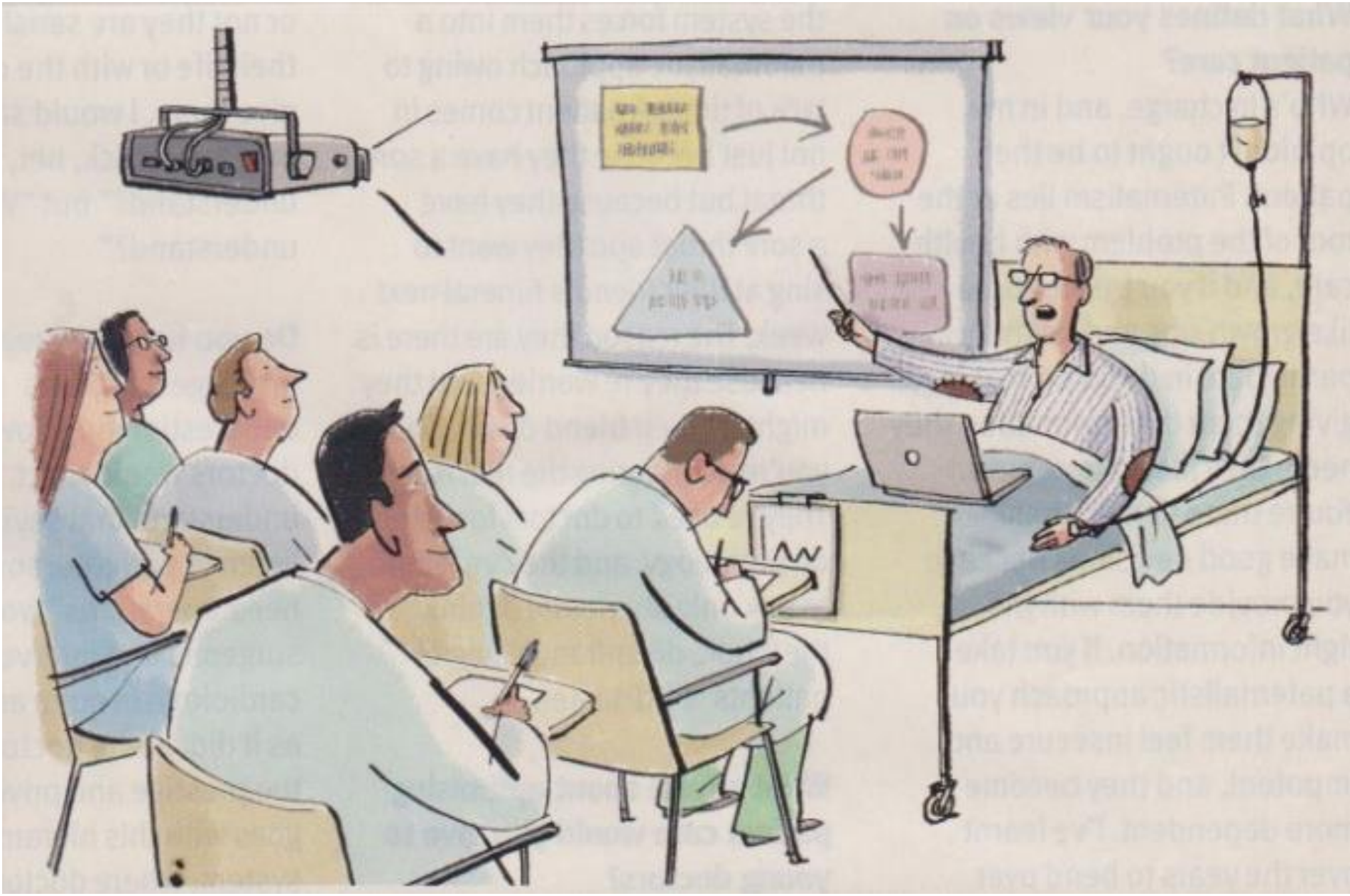
623K

When patient access to test results has a positive impact

Haughton Thornley Medical Centre

- Dr.Hannan proactively encourages use of patient online services
- Support for patients to use online services
- Support for patients to understand the information they are presented with – Lab Tests Online-UK
- Excellent patient and doctor satisfaction





What the tests don't show

Doctors are surprisingly bad at reading lab results. It's putting us all at risk

Washington Post, Daniel Morgan, ***Oct 5 2018.*** Daniel Morgan is Ass. Prof of epidemiology, public health, infec diseases, Univ of Maryland School of Medicine and Chief of Epidemiology at the Baltimore VA Medical Center.

- Every year, doctors in the US order more than 4 billion tests -my research has found that many physicians **misunderstand test results** or think tests are **more accurate than they are**.

- Doctors especially fail to grasp how false positives work, which means **they make crucial medical decisions — sometimes life-or-death calls — based on incorrect assumptions that patients have ailments that they probably don't**. When we do this without understanding the science of risk and probability, we **unacceptably increase the chances of making the wrong choice**.

Role for LTO…….

Direct Release of Test Results to Patients Increases Patient Engagement and Utilization of Care

F Pillemer et al.2016 PLoS ONE 11(6): e0154743. doi:10.1371/journal.pone.0154743

AIM: Determine the impact of allowing patients to view their test results via patient portal in one large health system over one year period

METHOD: Mixed methods analysis of electronic health record data, surveys, and qualitative interviews over one year period

RESULTS: **80%** of all patient portal users viewed test results

82.7% noted test results to be a very useful feature

70% patient portal has made their provider more accessible

CONCLUSIONS: Patients felt they should have direct access to test results

- Benefit -ability to monitor results over time, prepare before consultation
- Test results lead to unnecessary patient anxiety (patient and physician reported examples)
- Both groups noted the benefits of results released with provider interpretation.
- ***Overall portal access to test results was highly valued by patients and appeared to increase patient engagement***

Patient perceptions of receiving test results via online portals: a mixed-methods study

TD Giardiana. J Am Med Inform Assoc. 2018 Apr 1;25(4):440-446

AIM: Explore patients' experiences and preferences when accessing their test results via portals.

METHOD: Mixed methods study. 95 interviews with adults who accessed their results via the patient portal over a one year period

RESULTS:

63% did **not** receive any explanatory information or interpretation at the time they received the result

46% conducted online searches for further information about their result

Patients who received an abnormal result were more likely to experience negative emotions (56% vs 21%; and more likely to call their physician (44% vs 15%; compared with those who received normal results.

CONCLUSIONS:

Study findings suggest that **online portals are not currently designed to present test results to patients in a meaningful way**.

Patients experienced **negative emotions** often with abnormal results, but sometimes even with normal results.

Simply **providing access via portals is insufficient**; additional strategies are needed to **help patients interpret** and manage their online test results.

Given the absence of US national guidance, our findings could help **strengthen policy and practice** in this area and inform innovations that **promote patient understanding of test results**.

Role for LTO/AACC……

Patient's experiences of accessing their online electronic health records: National patient survey in Sweden

Moll J et al. J Med Internet Res 2018;20(11):e278

- Investigation of patient's experiences of accessing their electronic health records through the Swedish national patient portal, focussing on user characteristics, usage and attitutudes
- 5 month data collection in 2016 via patient survey
- 2587 users completed the survey, response rate 0.61%

- 72% used the online records portal once a month
- Main reason for access: gain overview of health status
- **98% respondents reported lab results were the most important information for them to access**
- 87% reported positive feedback towards online records access

- Important reasons for respondents to access online records included: patient empowerment, involvement, security

Reasons for using the online results portal

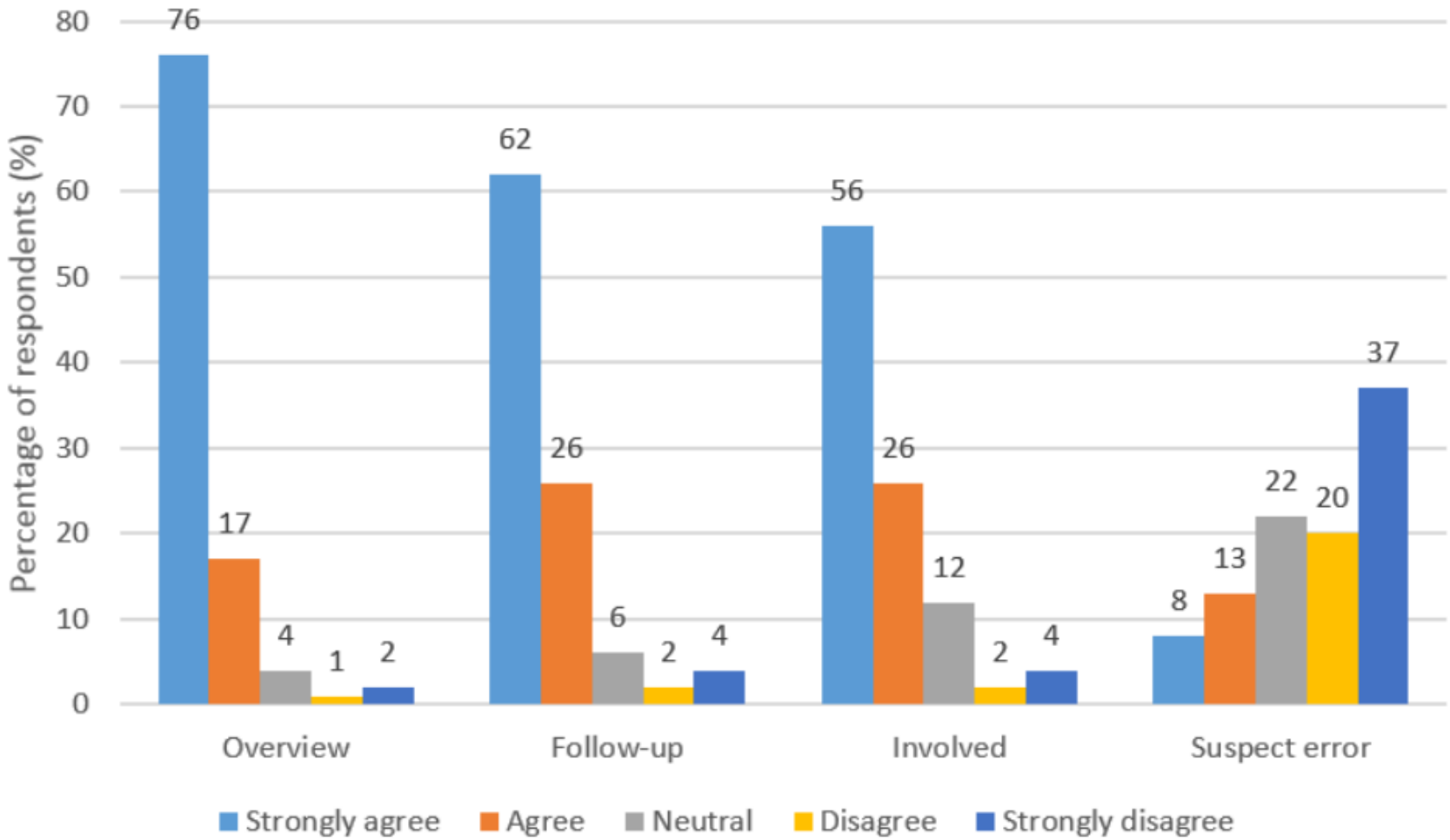
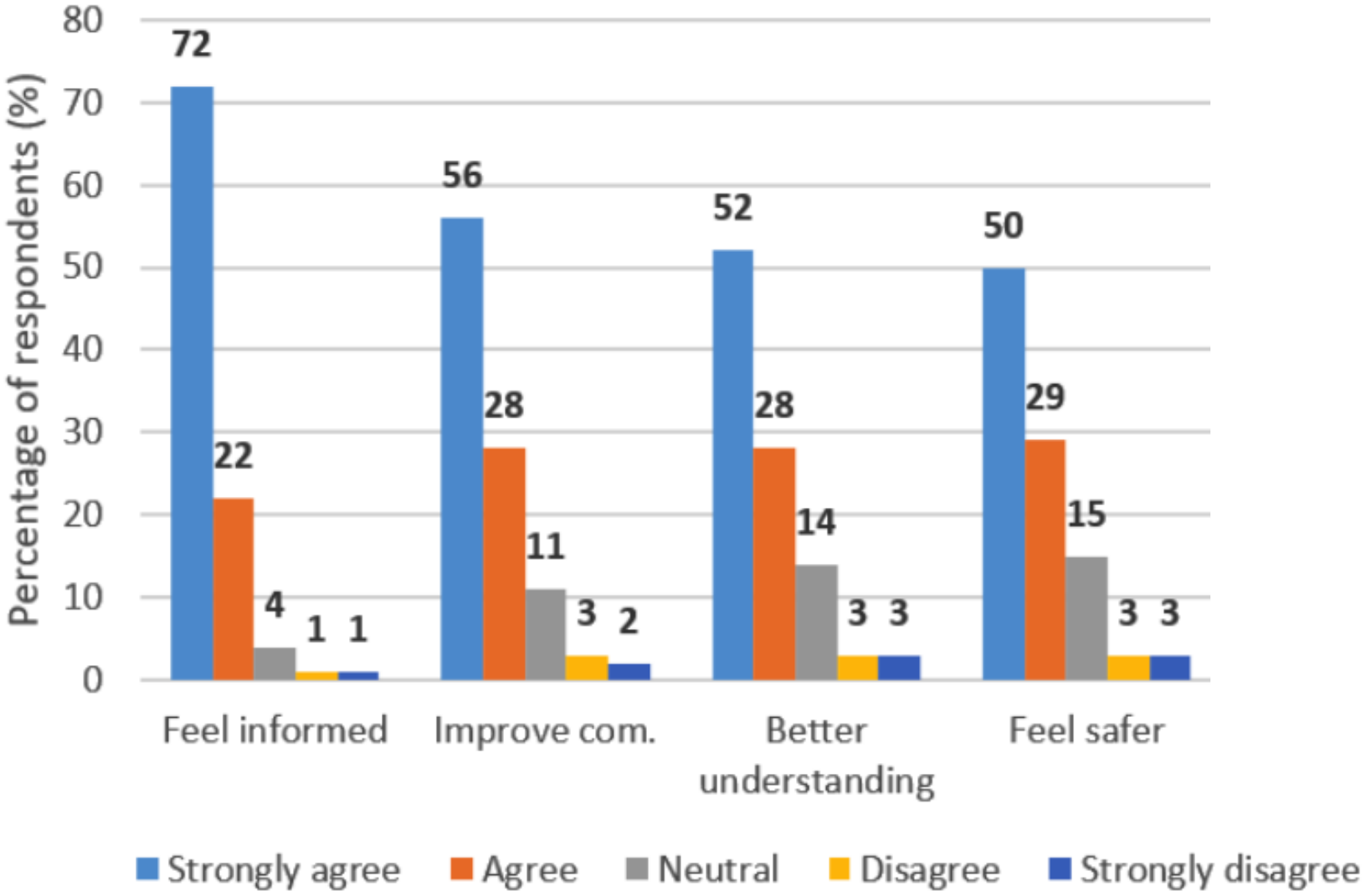


Figure 3. Moll J et al. J Med Internet Res. 2018. vol. 20:11. e278.

How using the online results portal makes respondents feel



Adapted from Figure 4. Moll J et al. J Med Internet Res. 2018. vol. 20:11. e278.

The Royal College of Pathologists

Pathology: the science behind the cure

Cancer Taskforce Report - RCPath response

Roll out of the National Laboratory Medicine Catalogue and links to *Lab Tests Online* will support patient access but it is likely that senior pathologists and scientists will need to spend more time explaining results to patients, which puts pressure on an already stretched service.

The proposed new target of a definitive diagnosis for 95% of patients within four weeks by 2020 is challenging but achievable if th ficant rapid investment in pathology workforce, equipment and organisation. As it ta ears to train a pathologist or scientist, an increase in training numbers is nee f there are to be sufficient experts to meet the target. In some pathology specia ainees has actually fallen in recent years, a trend that must be reversed.

We are pleased to see the recommendat at patients should have access to online test results but it is important that this is developed i dem with access to appropriate professional support and IT infrastructure. Roll out of the National Laboratory Medicine Catalogue and links to Lab Tests Online will support patient access but it is likely that senior pathologists and scientists will need to spend more time explaining results to patients, which puts additional pressure on an already stretched service.

Minimum standards for the display of test results to patients

Autumn 2018 – work in progress by ACB/RCPath

- No national standards and little guidance available for developers on how results should be displayed.

Minimum standards

- **All** numeric test results should be accompanied by a **clear reference range** (if available) **and units** for the analyte
- Numeric results that are **outside the reference range** should be **clearly flagged as abnormal**
- Where results have been transmitted from the laboratory with an **interpretive comment** this should be **clearly associated with the test** result
- **Links to provide further information about individual tests should be embedded within the patient view.**
  We recommend *LabTestsOnline.org.uk* as a reputable source of patient information on laboratory tests

The Royal College of Pathologists
Pathology: the science behind the cure

SOUTH WEST LONDON PATHOLOGY

11th May 2018

YouTube

If you want to find out more about this specific test, visit:
https://labtestsonline.org.uk/

LTO-UK has a new champion!

Dr.David Warriner

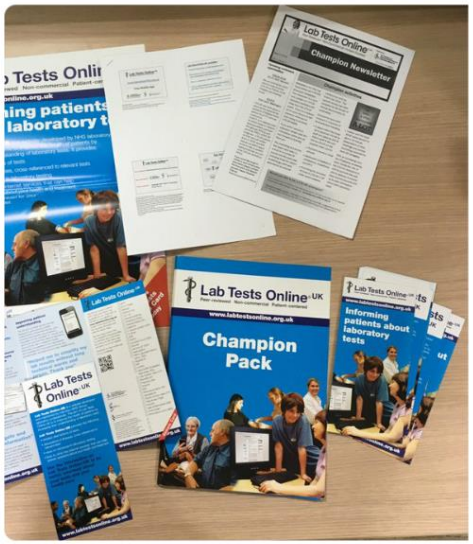
National Medical Director's Clinical Fellow, AoMRC

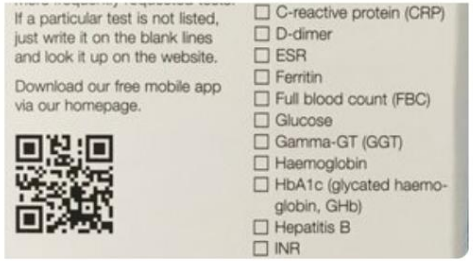
Choosing Wisely Campaign

David recently (spring 2018)tweeted his support for LTO-UK

David Warriner
@DrDavidWarriner

@LabTestsUK very happy to be a LabTests champion #toomuchmedicine #preventingoverdiagnosis #choosingwisely




If a particular test is not listed, just write it on the blank lines and look it up on the website.

Download our free mobile app via our homepage.

- C-reactive protein (CRP)
- D-dimer
- ESR
- Ferritin
- Full blood count (FBC)
- Glucose
- Gamma-GT (GGT)
- Haemoglobin
- HbA1c (glycated haemoglobin, GHb)
- Hepatitis B
- INR

NEW leaflets and posters

Request leaflets and posters from the website

or visit the Lab Tests Online-UK stand

3 year objectives(2017-19)

- Continue to implement the business plan
- Increase annual traffic by at least 10% year on year
- Ensure that GPs have direct links from their surgery to LTO-UK website
- Monitor and assess LTO-UK impact in primary care setting.
- Increase links with other public facing websites, e.g. national health related charities and others
- Secure permanent funding to support these activities
- Work with GP and patient record system suppliers to further integrate LTO-UK into patient facing applications.
- ***Work with the ACB and RCPath to push for mandatory standards for systems that display test results directly to patients.***

Lab Tests
Online UK
www.labtestsonline.org.uk
Informing patients
about laboratory test

LAB TESTS ONLINE UK

Your Trusted Guide

Peer Reviewed • Non-Commercial • Patient Centred

In collaboration and supported by

The Association for Clinical Biochemistry & Laboratory Medicine
Better Science, Better Testing, Better Care

IBMS Institute of Biomedical Science

The Royal College of Pathologists
Pathology: the science behind the cure

In affiliation with

AACC

The Invisible Doctor

FIT testing patient experience

A patient with an early diagnosis of bowel cancer following a FIT screening test visited the lab to meet the laboratory staff performing the test to share his experience and his gratitude for the service

Thanks to :

Rebecca Powney, LTO-UK