

Testing and Trust:

Public perceptions, expectations, and experiences of COVID-19 testing in Scotland



COVID-19 testing is a cornerstone of long-term pandemic control and a valuable tool that enables authorities to isolate cases, trace contacts, and track transmission. In Scotland, responsibility for an effective testing program is shared between government and members of the public, who are expected to seek out tests, use test kits to collect samples, and adhere to guidelines following a positive result. Yet for many people the testing process is a wholly novel and unprecedented experience. Public trust in the value and accuracy of testing is therefore essential to the success of the government's testing strategy. Our study asked:

- How do people understand the purpose and value of COVID-19 tests?
- What social factors influence people's willingness to undergo testing, trust test results, and follow government guidelines?
- How do people's perceptions and experiences of testing affect their trust in government and health services?

Testing and Trust is a rapid qualitative study with 70 participants aged 19–85 investigating understandings, expectations, and experiences of COVID-19 testing in Lothian, Scotland. This work was funded by the Scottish Government Chief Scientist Office through the Rapid Research in COVID-19 programme and supported by the DiaDev research project 'Investigating Diagnostic Devices in Global Health', funded by the European Research Council (www.diadev.eu). This briefing paper provides a summary of the project's key findings and recommendations for policymakers and practitioners in Scotland and further afield. It will be of particular interest to scientific advisors and stakeholders involved in the design, planning, and operational delivery of COVID-19 testing in Scotland and the UK.

Key findings

- Participants are highly motivated to seek testing and 'do the right thing' regarding government
 guidelines. Participants view testing as a duty to loved ones and wider society. In addition to its
 public health and medical functions they value testing for enabling social intimacy and freedom of
 movement.
- The testing system depends on multiple relationships of trust: in government, technology, health
 workers, private contractors, other members of the public, family members, and oneself.
 Participants demonstrate high levels of trust in the Scottish government, the National Health
 Service, and testing technologies. They are less trusting of the UK government, private contractors,
 digital bureaucracies, and their own ability to correctly collect a test sample.
- Participants experience testing as a process rather than a discrete technical event spanning symptoms and triage, accessing a test, taking a sample, and waiting for and interpreting results (see Figure 1). At each stage, the testing process entails a significant, often unacknowledged, 'diagnostic burden' of time, energy, and resources for people.
- The diagnostic burden includes weighing up information from multiple sources, interpreting
 ambiguities in testing criteria and symptoms, navigating digital bureaucracies, testing logistics,
 managing uncertainties around results, matching government guidelines to individual
 circumstances, and handling the repercussions of a positive or negative result. This burden is
 managed through social relationships and within the household is often carried by women.
- There is often a disconnect between the presentation of testing as straightforward in government documentation and personal experiences of testing as a social process. Ambiguity, uncertainty, and difficulty following guidelines erode trust and encourage people to find loopholes in the rules.

Figure 1: Testing as a social process

TESTING PROCESS	TRIAGE ACCESS	TEST RESULTS
The testing process relies on TRUST IN	GovernmentHealth systemTechnologyBureaucracy	 Members of the public Family Oneself
The testing process carries a DIAGNOSTIC BURDEN	 Undertaking research Organising logistics Navigating bureaucracy Collecting samples 	 Interpreting criteria and guidelines Calculating financial costs Negotiating with family and employers Deliberating conflicting responsibilities

The testing experience is shaped by interconnections between the testing process; relationships of trust; and the social, economic, and emotional burdens of diagnostic work.

Implications for policy and practice

The study reveals a disconnect between the notion of public 'compliance', which implies a passive relationship to guidelines, and people's experience of COVID-19 testing as a social process in which they are active participants and for which they carry substantial social, economic, and emotional burdens. High levels of public motivation to contribute to a society-wide response to COVID-19 suggests an opportunity to engage members of the public as willing partners in a national testing strategy.

At the four stages of the testing process, we recommend:

TRIAGE:

Improve public guidance to address ambiguities in the testing criteria. For instance, provide examples of scenario-based decision making to help people decide whether or not to book a test, and provide clarity on what will be expected of people during the testing process.

ACCESS:

Improve transparency of booking system algorithms and decision making so that people do not feel at the mercy of an arbitrary system. Use language that conveys appreciation for the effort that testing requires and acknowledge the difficulties people may face in accessing/undergoing/acting on testing. Address public scepticism about private testing contractors through greater transparency around the awarding of contracts and/or by emphasising links to the NHS. Increase the number of local walk-in testing centres.

TEST:

Enhance trust in test results and improve the testing experience by providing pre-test counselling and training, especially in scenarios where people are expected to collect a swab sample from themselves or others. For instance, through the creation of short videos (including accessible and child-friendly content) and the offering of tailored advice for testing children or people with disabilities. Consider the procurement of 'accessible' tests with less invasive sampling techniques for use with children and people with disabilities.

RESULTS:

Use language in the delivery of results that acknowledges the challenges people face when complying with guidelines and appreciates the sacrifices people are making. Emphasise the contributions of individual actions to a societal response. Remove barriers to self-isolation through improved economic and practical support.

The testing process in detail

TRIAGE

Prior even to experiencing symptoms, people are embedded in social networks that affect their decision making, ability, and motivation to seek out a test. Perceived levels of exposure, workplace conditions, anxiety over the health status of oneself or others, other people's stories of testing, local data on COVID-19 cases, and media stories about asymptomatic spreaders all affect public trust in testing prior to any symptoms and explain why asymptomatic individuals may seek out a COVID test.

Once symptoms develop, people realise they are personally responsible for determining whether they need to be tested. In most non-COVID diagnostic situations, the decision to test is taken in partnership with a GP, who evaluates a patient's symptoms before prescribing a test. Left to their own judgement, many people reported difficulties in deciding whether symptoms warranted a COVID-19 test. 'Continuous cough' and 'fever' were experienced as ambiguous. In moments of doubt, most participants booked a test 'to be on the safe side', to avoid social stigma around illness symptoms (sneezes, wet cough) at school or in the workplace, or because they felt pressured by others to do so. Decisions to test often conflicted with conviction that symptoms did not indicate COVID-19. Realising that others must be making similarly arbitrary decisions erodes trust in the efficacy of a communal response.

ACCESS

Individuals navigating the government's online testing platform encountered a variety of practical issues: booking errors, non-availability of slots in their area, or difficulties in negotiating transport in a COVID-safe way. People expressed a sense of disconnect between the system and their personal circumstances. Many felt that the time they had taken off work—to organise a test for themselves or their child, to drive to a testing centre, and to wait in self-isolation for the results—had not been sufficiently recognised by government. This phase tests relations of trust in the testing system (availability, efficiency of delivery, processing, communication) and with the workplace (possible financial and social penalties associated with time off work). In some cases people either did not feel able to follow guidelines for self-isolation or interpreted the guidelines flexibly to allow for personal needs and constraints.

TEST

Swabbing correctly is a complex task. In cases of self-testing, interviewees felt burdened by the expectations placed on them and questioned the lack of support from trained medical staff on site. Formal guidelines present the self-test as straightforward, but participants did not always find the instructions easy to follow and often worried they had collected the sample incorrectly. In cases where staff took the swab sample, some participants questioned whether they had done so effectively. Testing younger children relies on trust relationships with parents—predominantly mothers—and other

adults. Swabbing younger children and children with special needs represents an emotional and physical challenge, for which many people felt unprepared. Negative testing experiences were linked to a distrust of privately contracted testing services and the non-integration of testing services with the broader healthcare system.

RESULTS

A negative result sometimes creates a sense of reassurance and safety, and enables social obligations and interactions at home and at work to resume. But test results are not always taken at face value and are often interpreted in the context of the diagnostic suspicion that led people to get a test initially (e.g., risk of exposure in the workplace, knowledge of local prevalence, observations of other people's behaviour, close contact with a confirmed case, combination or severity of symptoms). Receiving a test result that conflicts with these expectations can raise doubts about the quality and accuracy of tests, healthcare staff, or sampling techniques. Some interviewees also referred to public discourses about high rates of 'false positives' that feed into anxieties over the validity of test results and reported testing data. Participants overwhelmingly indicated their willingness to follow government guidelines on test results but, in practice, when specific guidelines—e.g., self-isolation—conflict with social, practical, and economic needs, some participants interpret them flexibly without necessarily seeing this as breaking the rules.

Throughout the testing process, the disconnect between the seemingly straightforward presentation of government guidance—whether regarding criteria for testing, booking systems, self-test instructions, or self-isolation rules—and the real challenges that arise when those guidelines meet individual circumstances creates space for uncertainty and ambiguity that has the potential to open up loopholes and undermine trust in the wider pandemic response.

Contact the research team

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