

## COVID-19 second wave planning

During any future COVID-19 wave there will be variable impact on specialty services across the country. This will depend on local COVID-19 numbers, staff redeployment to general medicine, staff sickness and the need for individuals to shield, quarantine or self-isolate. The variability in services will mean departments will need to tailor their future working to their region's scenario. We foresee more localised impacts rather than a national stopping of services, but see it as paramount that we continue providing specialty endocrine services in future waves for our patients' safety.

Below we have recommended some generic advice, but have given more specific advice in a few areas with examples of practices from across the country so that they may be considered for local implementation. Some of the ideas may already exist in your trust; others could be prospectively implemented, or seen as a good idea for a more time efficient medium-term plan. Significant time spent on interim models should be kept to a minimum.

Further work continues from the Future of Endocrinology working group, ideas of clinical service innovations and efficiencies you are willing to share will be willingly received, please send them to [clinical@endocrinology.org](mailto:clinical@endocrinology.org)

### Available resources

There are many useful resources available for the management of patients with specialty endocrine, diabetes, obesity and lipid disorders during COVID-19, below are the key places we wish to bring your attention:

1. Society COVID-19 resource page:  
covers modified management plans for specific endocrine conditions in COVID-19 pandemic  
<https://www.endocrinology.org/clinical-practice/covid-19-resources-for-managing-endocrine-conditions/>
2. EJE COVID-19 resource series:  
<https://eje.bioscientifica.com/page/covid19-collection>
3. ABCD COVID-19 (Coronavirus) Information for Healthcare Professionals  
<https://abcd.care/coronavirus>
4. Delivering Diabetes and Endocrine Services in Acute NHS Trusts during COVID-19 Pandemic reset – May 2020.  
This paper gives a good example of services that should be continued depending on department's capacity (for ease included in appendix below- table 1). Please note we have adapted this table with authors consent.  
<https://abcd.care/sites/abcd.care/files/articles/ABCD-SfE-working-group-V4.1.pdf>

5. Royal College of Physicians:

<https://www.rcplondon.ac.uk/projects/rcp-and-covid-19>

## The Society recommends the following:

### Minimum acceptable endocrine capacity

During future waves, endocrine departmental capacity should run as high as possible. If capacity reduction is required we have modified the ABCD risk stratification document of endocrine conditions (see appendix 1) for 75%, 50% and 25% capacity options. **The minimum capacity we deem to provide safe endocrine patient care is 25%.** We see it as a clinical risk to not be able to manage patients with acute endocrine issues in both the inpatient and outpatient settings, including urgent dynamic endocrine testing.

This 25% capacity would allow those priority conditions needing specialist endocrine input to still be managed:

- Pituitary tumours with visual loss - suspected apoplexy, Cushing's/ acromegaly/ non-functioning adenomas requiring immediate pre op assessment and post-surgical follow-up
- Functioning pheochromocytoma/paraganglioma, Cushing's, suspected endocrine cancers
- Thyrotoxicosis (new or those requiring high dose antithyroid drugs), worsening thyroid eye disease, suspicious thyroid nodules to exclude thyroid cancer
- Thyroid cancer with a change in status or new symptoms that require face-to-face examination
- Hypothyroid coma and thyrotoxic crisis
- Severe or symptomatic hypercalcaemia and hypocalcaemia
- Adrenal insufficiency (AI): new diagnoses, acute admissions with adrenal crisis, patients needed confirmatory diagnostic testing for AI and urgent need for corticosteroids, unstable congenital adrenal hyperplasia (CAH)
- Severe hyponatraemia
- Diabetes insipidus: new presentation including testing or acute admission
- Denosumab treatment
- Endocrine disorders in pregnancy

Please see **Appendix 1: tables 2 and 3** for suggested conditions if you have the ability to run 50% or 75% capacity in your department.

### Consideration for specific team members

**25% capacity should be for all clinical groups** e.g. endocrine specialist nurses, registrars, junior doctors, consultants. This is due to the differing roles each member plays within the service and its overall function.

- This should not just simply be the time clinicians are allocated as COVID-19 downtime, but allocated time to continue the endocrine services. Rest from COVID-19 and specialty work will be required.
- Sufficient infrastructure should be maintained within the endocrine department to support the continued work and management of endocrine patients, this will include, but not be limited to; admin support, access to specialist and urgent routine phlebotomy, imaging and other radiological investigations, treatments.

## Maximise home/virtual working for staff

Many trusts are maximising potential for home working. This is of particular importance for those who are required to shield or self-isolate (but who are well enough to work).

- This requires excellent IT support and equipment to have full access from either a COVID-19 secure space on the trust site or from home (this requires at the very least: computer with remote access, dictation, radiology and biochemical results access, virtual clinical ability for video clinics, telephone access), trusts should support as required to ensure this flexibility is available for employees.
- Departmental meetings/MDTs/huddles should be run virtually, to be inclusive for all team members.

## Shielding Clinicians and Academics (i.e. limited general medicine)

Departments could identify tasks that do not require patient contact e.g.

- GP advice and guidance
- Virtual clinics
- Triaging referrals
- Local education at various grades? (medical students, registrars, nurses)
- Support and advice to regional colleagues
- Ensure well-being of staff is monitored. The below links are examples and not exhaustive of available resources, there will also be local trust services
  - o <https://www.nhs.uk/oneyou/every-mind-matters/>
  - o <https://www.nhsemployers.org/covid19/health-safety-and-wellbeing/support-available-for-nhs-staff>

## Endocrine Nursing

Crucial to ensuring that endocrine services continue to provide safe and high quality care to patients during the on-going COVID-19 pandemic is the provision of timely, consistent and safe facilities for endocrine testing, treatment initiation and monitoring, counselling and remote facilities for advice and guidance. Fundamental to this is the continued provision of consistent endocrine nursing service delivered by experienced endocrine specialist nurses.

Endocrine nursing roles should be clearly defined. As a department you need to be able to protect nurses to be able to:

- Provide patient support and education for example adrenal insufficiency.
- Provide support for other departments through telephone advice lines
- Continue urgent endocrine investigations (i.e. those related to table 1 below)
- There may also be some back log from the previous rescheduling of tests and this must be taken into consideration as they may no longer be appropriate to further delay.

Some departments have become more reliant on nurse lead services (thyroid and adrenal clinics, helplines, dynamic testing). We recommend teams consider a specific time set aside to review cases with nursing staff if you are increasing/altering their workload.

## Specialty Registrars

We must consider the specialty training for our trainees.

- Departments could ask those trainees in particular those nearing the end of their training needs and where possible tailor clinical placements to meet this requirements
- Training clinics e.g. once a month- these could involve a Consultant sitting in with a registrar, with the latter in the driving seat, potentially delivered by IT solutions such as 'Attend Anywhere' when not face-to-face. Feedback of such approaches has been excellent, and allows better identification of trainee's competencies and training requirements.
- Pre- and or post clinic discussion of all patients attending telephone and or virtual clinics with trainees is encouraged as an improved training opportunity, and provides better and more efficient care, and appropriate discharge from follow up. Supervising consultant job plans should be examined to allow time for this to be delivered.
- Regional training of registrars with specialty teaching should be continued and converted to virtual format

## Primary care contact with secondary and tertiary care

GP points of contact e.g. advice and guidance/choose and book/email advice lines

- Current methods can be quite heavy for secretarial support at GP level.
  - o It may be worth finding out which GP electronic record system your local GPs use e.g. SystemOne, EmisWeb, Vision. Some have benefits, e.g. in SystemOne there are some shared patient records that may improve integrated working.
- Needs to be instantly accessible from off site, visible to all within the trust who provide patient care to avoid future duplication of work and understand previous advice given (i.e. may need manual upload to electronic patient records (EPR) as often separate to EPR).

Good options that have been shown to work:

- Email advice: endocrine/ diabetes/ lipid email guidance advice through NHS.net email system. There needs to be a mechanism for this to be added to patient records which will need a local solution.
- Phone advice: could have a designated person (Consultant, senior registrar, nurse) via the phone for advice.

## Referral routes

At a local level we recommend that departments ensure the primary, secondary and tertiary care within their region are aware of referral routes for patients, and the support network in place as these may have been altered in the early stages of the pandemic.

- Mechanisms of support from tertiary centres should be clearly established ASAP so that if a DGH was unable to provide clinical management for those conditions listed in table 1 they could be redirected to the local tertiary centre.
- Consider virtual regional meetings with a representative from each hospital in the region to discuss local implications of patient care and support options that may be possible between hospitals as different regions are impacted by COVID-19 in different ways.
- Endocrinology could look at models already in place in diabetes e.g.
  - o Consultant links with GP practices for discussion of cases.
  - o Virtual endocrine MDT/ meetings for cases to be discussed between GPs and endocrine consultants

## Referral triaging

Many trusts have already opted for a more vigorous review of initial referrals to help with prospective prioritisation with outcomes as:

- Advice and guidance only as an alternative to outpatient review. Detailed advice letter, patient care returned to referrer.
  - o Consider generic responses/letters with appropriate advice for case.
- Consultation required with blood tests performed prior to clinic. **Patient factors need consideration to ensure equity of access.**
  - o Points to consider when choosing physical/virtual appointment: Physical examination required, hospital only investigations in clinic, hearing problems/disabilities, access to transport. Local COVID-19 restrictions
    - Virtual consultation (majority for endocrinology). Telephone, video or Attend Anywhere.
    - Face to face consultation.
  - o Consider longer time frame for initial review depending on your department's abilities: for example: Urgent (<1M/Red), Priority 1 (<3M/Yellow), Priority 2 (3-6M/Green), Priority 3 (advice and guidance given to GP and discharged back to GP care with advice, with re-referral as required).

To facilitate the increase in remote/virtual clinics as one of the planned models for the future NHS working this will require extended co-working with primary care, with pre clinic triage and organising pre-clinic investigations (e.g. biochemistry and radiology). This should provide a more streamlined patient pathway and better patient care. Further work on future models in endocrinology is ongoing within the Future of Endocrinology working group.

## Consultations

Virtual consultations are already in place for a significant percentage of endocrine patients, up to 100% in some centres. Moving forward models of care are likely to be adapted to integrate virtual clinics and patient initiated follow up (<https://www.rcplondon.ac.uk/projects/outputs/rebuilding-nhs>). Prospective identification of patients with systems put in place to allow recall to clinic as telephone or video rather than the default of face to face could be started now.

## Specific areas to review

### Phlebotomy provisions

Adequate phlebotomy access needs to be well set up within the regions, this is not limited to the endocrine specialty and a trust wide approach is a more appropriate use of resources. There are however, several specialty tests that need consideration due to their specific collection requirements, and endocrinology departments should identify a designated site for these to be continued throughout the pandemic.

Examples that have worked well across the country include:

- Phlebotomy hubs – typically located in the community, where primary, secondary and tertiary care all have the ability to request bloods.
  - o Advantages: reduces footfall to hospital sites, pooling resources and utilising the same phlebotomy team. (This may require the option of multiple IT systems to be accessed to facilitate this).
  - o Disadvantages: may move burden of care and requesting onto primary care; Some centres with EPR will need consideration of ordering mechanisms and visibility of results depending on local systems and interoperability
- “Drive through” phlebotomy in car parks on hospital sites have reduce footfall into standard busy clinic areas.
- Point of care testing, available for HbA1c, basic biochemistry.

### MDTs

We believe all departments have converted to virtual MDTs, feedback is as follows:

- Advantage – logistically easier to attend (split site working/shielding/different trusts).
- Disadvantage – harder for new people to form relationships and discuss additional problems.

### Clinical prioritisation of work load

- Consider reviewing your patients and look at endocrine patients to proactively to plan for future waves.

### Patient education

Consider what can be achieved virtually, on line teaching, or with virtual groups.

## Patient Portals

Where possible patients should have access to their medical records.

- Patients have access to their medical records via an electronic portal this can include– letters, biochemical results, appointment dates etc.
- Some systems allow two-way messaging system between clinician and patient.
- Patients can submit information such as BP, images of results directly into their records.

## Research

This was stopped in the 1<sup>st</sup> wave, but where possible clinical trials and other research should be continued.

## Ideas Society members have reported to work well

### Identifying at risk patients:

#### E.g. adrenal insufficiency patients

- An information sharing arrangement between hospital trusts and local ambulance services for patients with adrenal insufficiency - this allows paramedic crews called to an address to identify that there is patient in the address with adrenal insufficiency who may need parenteral hydrocortisone
- Computer alert system in place when patient admitted to hospital that advises not to omit hydrocortisone medication
- Linking with patient support groups and Society information on management of adrenal insufficiency via QR code on the Steroid Emergency Card

### Examples of specific clinic ideas that have been shown to reduce workload:

- Adrenal incidentaloma pathways, various formats:
  - Combined pre clinic discussion with radiologist, endocrinologist and nurse. Reduced those seen in clinic by approx. 75% and reduction in requests for reimaging or different mode of reimaging, and biochemical investigations.
  - All incidentalomas taken to adrenal MDT characterise if benign/indeterminate/malignant/other (non-adrenal - not so infrequent) and then biochemical work up as appropriate prior to clinic appointment, with standardised letters.
  - Run as a nurse lead service in many trusts with consultant oversight
- Hypercalcaemia
  - All investigations pre clinic (PTH, vitamin D and urinary calcium, renal USS, DEXA) allows one stop clinic
- Endocrine genetics
  - Endocrine genetics patients' database in collaboration with Cancer Genetics Endocrine nurse led recall of patients and families for the surveillance tests and imaging prior to clinic review.
- Thyroid cancer clinics

- Risk stratification of patients, can be run as a nurse-led virtual clinic in particular for the identified low risk patients in years 1-5 to monitor their TFTs and Tg, with discharge at 5 years if all remains well. Includes re-entry to clinic that is patient initiated if they have concerns. (New UK thyroid cancer consensus statements will endorse this; due for publication mid 2021)
- Immunotherapy patients - we suggest that you peer-review your trusts protocols in the other departments
  - Guidelines for other specialities using immunotherapy and managing patients on immunotherapy with endocrinopathy complication, including oncology, hepatology, gastroenterology, rheumatology, dermatology
- All clinics
  - Devising standardised endocrine pathways for all the common endocrine conditions to avoid duplication and improve efficiency. Also to facilitate effective discharge planning with defined criteria.

#### Summary of recommendations:

- Endocrine departmental capacity should be left at a **minimum of 25%** - higher wherever possible.
- Clearly defined roles for specific team members, including nurses, shielding colleagues and registrars.
- Maintaining specialty training for endocrine trainees.
- Integrating working between primary, secondary and tertiary care as much as possible with shared systems.
- Ensuring the primary, secondary and tertiary care centres within a region understand referral routes for patients.
- Identifying patients for whom virtual consultations are appropriate long term.
- Reviewing phlebotomy services, MDTs, work load priorities and using available resources.



## Appendix

<https://abcd.care/sites/abcd.care/files/articles/ABCD-SfE-working-group-V4.1.pdf>

### At 25% of Capacity table 1

Disease Condition	Comments
<ol style="list-style-type: none"><li>1. Pituitary tumours with visual loss -suspected apoplexy, Cushing's/ acromegaly/non-functioning adenomas requiring immediate post-surgical follow-up</li><li>2. Functioning phaeochromocytoma/paraganglioma, Cushing's, suspected endocrine cancers</li><li>3. Radiologically concerning adrenal nodules (e.g. &gt; 4cm, in keeping with ACC)</li><li>4. Thyrotoxicosis (new or those requiring high dose treatment), Worsening thyroid eye disease, suspicious thyroid nodules to exclude cancer</li><li>5. Thyroid cancer with a change in status or new symptoms that require face to face examination</li><li>6. Hypothyroid coma and thyrotoxic crisis</li><li>7. Severe or symptomatic hypercalcaemia and hypocalcaemia</li><li>8. Adrenal insufficiency (AI): new diagnoses, acute admissions with adrenal crisis, patients needed confirmatory diagnostic testing for AI and urgent need for corticosteroids, unstable CAH</li><li>9. Severe hyponatraemia</li><li>10. Diabetes insipidus: new presentation including testing or acute admission</li><li>11. Denosumab treatment</li><li>12. Endocrine disorders in pregnancy</li></ol>	<p>Patients will need urgent review virtually but may require face to face in some cases.</p> <p>Some cases managed in tertiary care.</p> <p>Triaging by clinician essential.</p>

### At 50% of Capacity table 2

Disease Condition	Comments
<ol style="list-style-type: none"><li>1. <b>( a ) and in addition</b></li><li>2. Dynamic testing and treatments (tests for Adrenal Insufficiency )</li><li>3. Stable adrenal insufficiency, CAH on glucocorticoids and diabetes insipidus</li><li>4. Severe osteoporosis- recurrent fractures</li><li>5. Fertility services</li><li>6. Medical management of obesity in Tier 3 and 4 services (including those awaiting surgery delayed by COVID-19 and the management of post-bariatric surgery complications)</li></ol>	<p>Triaging by clinician essential</p>

### At 75% of Capacity table 3

Disease Condition	Comments
<b>(a)+(b) and in addition</b> <ol style="list-style-type: none"><li>1. Less urgent dynamic testing (glucocorticoid weaning etc.)</li><li>2. Long term thyroid cancer f/up with stable disease</li><li>3. Stable thyrotoxicosis on treatment</li><li>4. Radiologically looking benign incidental adenomas, for clinical and biochemical assessment</li><li>5. Hypogonadal men, secondary amenorrhea not on treatment</li><li>6. Testosterone and gonadotrophin injections</li><li>7. Osteoporosis severe without fractures</li><li>8. Stable hypoparathyroidism and primary hyperparathyroidism</li></ol>	Triaging by clinician essential,

### At 90-100 % of Capacity table 4

Disease Condition
<b>(a)+(b)+(c) and in addition</b> <ol style="list-style-type: none"><li>1. Full clinical services depending upon local arrangements</li><li>2. Chronic pituitary adenomas, stable hypopituitarism</li><li>3. Dynamic test e.g. growth hormone, water deprivation test</li><li>4. All cold adrenal, thyroid, reproductive, late effects cases</li><li>5. Osteoporosis and bisphosphonate treatment</li><li>6. Tier 4 surgical management of obesity</li><li>7. Referrals for query Conns- as this could initially be managed medically in the community with optimisation of hypertension and potassium prior to full investigations</li></ol>

Please note somatostatin receptor analogues can be commenced by the homecare teams in the community and so the starting of treatment need not be delayed.