Q1: What is the NOD?
A1: The NOD is the National Ophthalmology Database. It was established under the auspices of the Royal College of Ophthalmologists (RCOphth) in 2010 to collate pseudonymised data collected as a by-product of routine clinical care using electronic medical record (EMR) systems for the purposes of national audit, research and establishing meaningful measures for revalidation.

Q2: What is the National Ophthalmology Audit?
A2: The RCOphth was commissioned in 2014 by the Healthcare Quality Improvement Partnership (HQIP) and funded by NHS England and the Welsh Government to build on the work of NOD and deliver a national audit programme for Ophthalmology. The audit forms part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP) and the project will concentrate initially on NHS cataract surgery in England and Wales, as well as feasibility studies for future audits on glaucoma, retinal detachment and wet age-related macular degeneration.

Q3: Is it mandatory for organisations to participate in the national clinical audit?
A3: NHS Trusts are mandated to participate in the NCAPOP, including this audit, through the terms of the NHS Standard Contract, so long as they provide the relevant service, in this case cataract surgery.

Q4: How can our organisation participate in the audit?
A4: All organisations providing NHS funded cataract surgery in England and Wales are eligible to participate in the audit. If you have not received an invitation letter or a Welcome Pack for your organisation, please contact noa.project@rcophth.ac.uk. We will be pleased to confirm your eligibility and invite your organisation to participate in the audit.
FAQs

Q5: How do I submit data into the audit?

A5: Data will be collected electronically from EMR systems. Organisations with an existing EMR system or database which collects data compliant with the Minimum Cataract National Data Set for National Ophthalmology Audit Database will have their data extracted remotely from the EMR system and uploaded into the National Ophthalmology Database. For organisations with paper based records and no EMR the College will provide electronic data collection tools to allow them to participate (see below).

Q6: We don’t have an EMR and we want to participate in the audit

A6: Centres which are paper based and do not currently have access to a suitable electronic data collection facility will be provided with electronic tools to enable them to participate fully in the audit for the current duration of the audit’s contract with HQIP which is until August 2017.

Medisoft will provide access to their cataract Electronic Medical Record (EMR) system to paper based organisations free-of-charge over this period either in the form of a web-based application or as installed software. There is a third option by which Trusts in addition can choose to pay the third party costs of full electronic integration between the EMR and the hospital PAS and IOL measurement machines (see details below). Because these are third party costs and not essential to the audit, they cannot be covered by the central audit funding.

All options include the capacity for post-operative data to be electronically entered by community optometrists in their practices and transferred automatically back into the patient’s Medisoft record.
Q7: We note that there are 3 EMR options for our organisation with varying elements of functionality. Can you summarise the pros and cons of each of these options for the clinicians?

A7: NHS organisations vary in how they work and we have therefore tried to provide some flexibility to cater for a variety of ways of working. Full participation in the audit is possible using any one of the three options. The key features of each option are described in the table below:

<table>
<thead>
<tr>
<th>Access system</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Server</td>
<td>Trust Server</td>
<td>Web Browser</td>
<td></td>
</tr>
<tr>
<td>Installation burden / lead-in time (some variation depending on local arrangements)</td>
<td>Installation 12 hours; lead-in time dependent on local IT capacity</td>
<td>Installation 12 hours; lead-in time dependent on local IT capacity</td>
<td>Local IG approvals and access to the hosted website</td>
</tr>
<tr>
<td>Speed of audit application</td>
<td>Moderate to Quick</td>
<td>Moderate to Quick</td>
<td>Moderate</td>
</tr>
<tr>
<td>Manual entry of patient demographics (Name, Address, DOB)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Manual entry of GP information (Name, Address)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Manual entry of biometry data (AL, IOL Power)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>IOL calculations available</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Training documentation available</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Onsite training provided (1 day)</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Automatic return of optometry post-op information available</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cost</td>
<td>£0</td>
<td>£4,150 + VAT</td>
<td>£0</td>
</tr>
</tbody>
</table>

Options 1&3 are similar in terms of user functionality. The difference between them is that Option 1 is installed on your organisation’s server inside your firewall whereas Option 3 is a remotely hosted solution which you access via a web browser. With both of these two free options the patient demographic details, GP information and biometry need to be manually entered when recording the patient’s clinical information. In keeping with many national audits, relevant information can be entered in advance of surgery, or can be entered in theatre by the surgical team, depending on how you choose use the EMR data collection audit tool. Having recorded these details the EMR will be able to generate a printable
operation note and a letter to the GP and Optometrist (for automatic return of post-operative VA & Refraction if needed).

Option 2 provides the opportunity to purchase additional functionality to support the automated download of patient and GP details from your local PAS, the download of IOL master biometry measurements, and the performance of IOL power calculations within the Medisoft program itself. Under this option, the EMR provided is installed on your local server and integrated electronically with these other softwares and devices. The cost charged covers a day of onsite training plus copyright fees for use of the IOL formulae.

Q8: We don’t want the Medisoft EMR as we have an in-house database, can we still participate in the audit?

A8: If your organisation uses an in-house database in your cataract service, you will be able to participate in the audit provided the data are compliant with the audit dataset. Please contact noa.project@rcophth.ac.uk to request a copy of the audit data dictionary and the minimum dataset for the cataract audit. This will give you more information on what will be needed, including the data formats. We will be pleased to discuss how best to proceed with possible inclusion.

Q9: How long will the audit run for?

A9: The first annual national data collection period will run from September 2015 to August 2016, with analysis to follow, and the second from September 2016 to August 2017.

Q10: When will the first data extraction occur?

A10: The first data extraction will be in September 2016 or shortly thereafter to allow for post-operative results to become available. This extraction will be for surgery undertaken between September 2015 and August 2016.

Q11: What standards will be used for the audit?

A11: As a general guide the cataract surgery guidelines will be used for the audit. https://www.rcophth.ac.uk/wp-content/uploads/2014/12/2010-SCI-069-Cataract-Surgery-Guidelines-2010-SEPTEMBER-2010.pdf. The actual benchmarks for PCR and VA loss will be refined by the audit data themselves which are very likely to be at or close to 2% and 1.5% respectively.
Q12: What data will be collected for the audit?

A12: Please refer to the national datasets section on the homepage. The Cataract Minimum Dataset will form the basis of the audit.

Q13: How long will data be kept for and when will it be destroyed?

A13: The Data Controllers are HQIP, NHS England (NHSE) and the Welsh Government (WG). Data will be retained by the College in partnership with our audit delivery partners until the end of our contract with HQIP which will be 31 August 2017 at the earliest. The Data Controllers will determine the duration of data retention subsequent to this, in line with the principles of the Data Protection Act.

Q14: Where will the audit report be published and who will have access to these?

A14: The audit reports will be available on www.nodaudit.org.uk and data.gov.uk websites. All audit reports will be publically accessible. Our first report will be based on historic data and will provide us with a mechanism for refinement of the methodology. Information included in this initial report will be limited as the audit will be in a developmental phase. Following the first prospective data collection period covering surgery undertaken from September 2015 to August 2016, full reporting will come into effect. This will include case complexity adjusted outcomes for surgical complications and visual acuity loss from cataract surgery for named consultant and independent surgeons, and for named surgical centres.

Q15: How will the community optometrists enter the follow up data for a cataract patient?

A15: At centres using the electronic optometric data return tool patients will be issued with a letter that contains a unique PIN code. The PIN code will be used to submit the post-operative data using a specially designed web portal which will automatically transfer the information into the patient’s Medisoft record back in the hospital. No patient-identifiable data will be visible or stored in the web portal: only the unique PIN code will be visible.
Q16: Does the NOD database hold patient identifiable data?

A16: The NOD database does not hold any patient identifiable data but does have a unique ID for each patient in order that data extracted from multiple visits can be appropriately matched to the correct patient record. The data are therefore pseudonymised. The unique pseudonymous identifier will be automatically assigned by each Hospital’s EMR software and therefore only the patient’s hospital together with its EMR software provider will be able to identify the patient. This degree of anonymization is standard in other national databases and the approach will be extended to non-EMR sourced data.

It is possible that the audit will seek to extract patient identifiable data in the future to facilitate linkage at patient record level with other clinical datasets in order to enhance the scope and impact of the audit. If so a legal basis for this data flow would first be established and the participating centres including their Caldicott Guardians would be informed.

Q17: Does the audit have a section 251 exemption?

A17: The audit does not currently have a section 251 exemption and as such no patient identifiable data will be extracted. Looking ahead, the College intends to apply for an exemption in order to facilitate linkage with other databases such as the Health and Social Care Information Centre (HSCIC). An exemption would allow added value to the audit but is not required for our current HQIP Audit deliverables. If S251 exemption is granted then all centres will be informed of the changed status of the audit, and permissions for data extraction will be revised accordingly.

Q18: What will the EMR options be for providers once the audit has been completed?

A18: Once the audit has been completed, participating Trusts that were provided with the Medisoft Ophthalmology EMR system for the duration of the audit will be able to decide how they wish to proceed going forward. There will be a variety of alternatives depending on local arrangements. For trusts wishing to return to paper based records or move to a different EMR system, the data which has been collected as part of the audit will remain available indefinitely within the trust using a ‘read only’ version of Medisoft (no further surgery can be entered but local audit functions remain available) for Options 1 & 2, or a nominal fee for ongoing ‘read only’ access via the remotely hosted Option 3 (see Q7 for the details of these 3 options). In the event that a trust may wish to continue with using Medisoft, this will be available commercially. The cost of ongoing use of the system will depend on the size of the trust and the complexity of the local configuration. Medisoft will be able to provide a quotation to allow for ongoing use following completion of the audit, should this be wanted.