

**How to analyse your own PAD CLI cases**

**1. Logging in to the NVR and running an episode search**

Login to the NVR as usual and run an episode search by clicking “Search” on the top left corner and then “Episode Search” from the drop-down menu.

**2. Filtering and exporting patient episodes**

- You are able to filter your episodes by clicking on the ‘funnel’ in each column header. Clicking on the “Procedure” funnel will allow you to choose “Lower-limb Bypass” or “Angioplasty”.
- If you don’t use the filter function, the export will contain all of your episodes.
- You are also able to search ascending or descending by clicking on the column header.
- It is possible to filter by procedure date, either by using the date picker or by typing the date in the dd/MMM/yyyy format (01/Jan/2019 rather than 01/01/2019).
- Pressing the button entitled ‘Export All Records’ will download a copy of the records into a csv file.

**Search Results**

Name	ID	Local ID	Date of Birth	Procedure	Procedure Date	Status
	494 059 9655	938949343438	08 Jan 1970	AAA repair		data
	494 059 9973	589589345899	08 Jan 1970	AAA repair		data
	494 059 9973	589589345899	08 Jan 1970	Carotid Intervention		data
	494 059 9701	4834304803043	08 Jan 1970	AAA repair		data
	494 059 9655	938949343438	08 Jan 1970	Carotid Intervention		Incomplete data entry - Not submitted
	494 273 3235	5840564	08 Jan 1970	AAA repair		Incomplete data entry - Not submitted

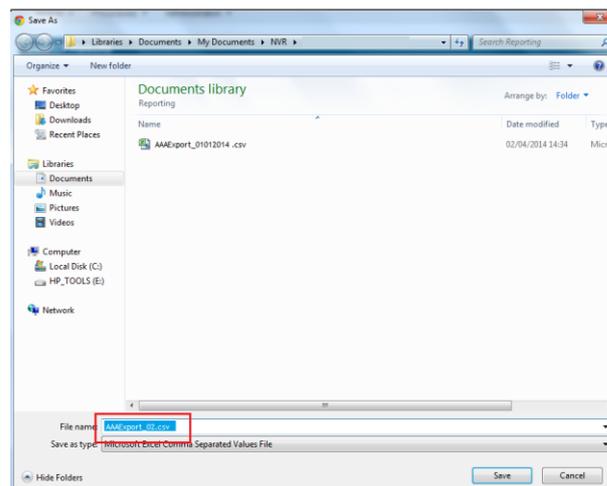
1 - 6 of 6 items

**Export All Results**

Name	ID	Local ID	Date of Birth	Procedure	Lead Vasc Specialist	Procedure Date	D/S	Status	Shared
***Confidential***						09 Apr 2020			
***Confidential***						09 Apr 2020			
***Confidential***						17 Mar 2020			
***Confidential***						16 Mar 2020			
***Confidential***						16 Mar 2020			
***Confidential***						10 Mar 2020			
***Confidential***						06 Mar 2020			
***Confidential***						04 Mar 2020			

From date: 01/Jan/2019  
 To date: 31/Dec/2019  
 December 2019 calendar view showing 31st Dec 2019 selected.

- Amend the file name and choose an appropriate location to save your export to.
- CSV files should open in Microsoft Excel by default, but will also be read by a number of statistical programmes.



### 3. Interpreting the export and key columns to focus on

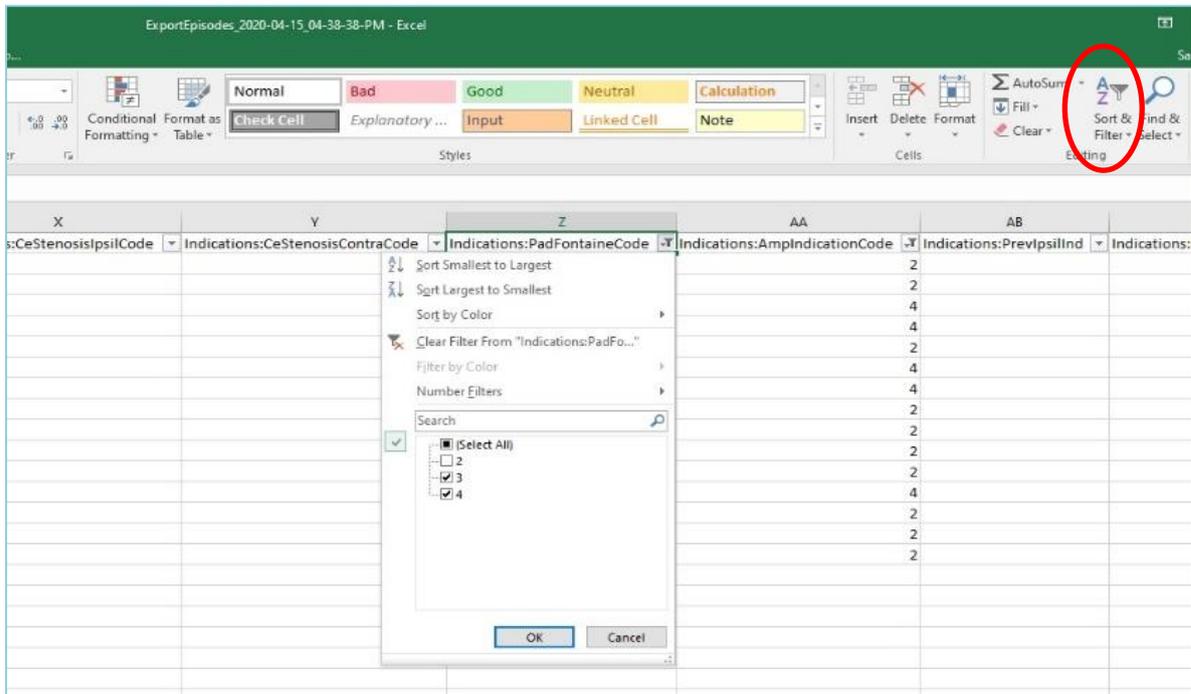
Column	Definition	Comments
A	Whether record has been submitted on the NVR	TRUE = yes, FALSE = no
B	Procedure Type	AAA, carotid, angioplasty, bypass or amputation
D	Hospital Name	Useful if you operate at more than one hospital
E	Patient's local ID	
H	Patient's Gender	1 = male, 2 = female
N	Admission Date	
O	Admission Mode	1 = elective, 2 = non-elective
P	Procedure Date	
Q	Procedure Start Time	
R	Discharge/Death Date	
S	Discharge Status	0 = dead, 1 = alive at discharge
W	Side of Indication (not AAA)	1 = right, 2 = left, 3 = bilateral
Z	Fontaine Code	1= 1 – No symptoms 2= 2 – Intermittent claudication 3= 3 – Nocturnal and/or resting pain 4= 4 – Necrosis and/or gangrene in the limb
AA	Presenting Problem	1=acute limb ischemia 2=chronic limb ischemia 3=neuropathy 4=tissue loss 5=uncontrolled infection 6=trauma 7=aneurysm

For more information, please refer to the [NVR Data Dictionary](#)

#### 4. How to use the NVR export to find your emergency CLI patients

Use the filter function within Excel to break the procedures down to only look at the patients admitted non-electively with CLI. These are the steps to follow:

- Only include the patients admitted non-electively (a value of 2 in the admission mode column (O))
- Only include those patients with a Fontaine Score of 3 or 4 (column Z)
- Exclude patients with a presenting problem of acute limb ischaemia, trauma or aneurysm (exclude 1, 6 and 7 in column AA).



It might be worth copying and pasting these CLI patient records into a new spreadsheet or worksheet, so that any other rows and columns don't get in the way of future calculations.

#### 5. How to use the NVR export to calculate procedure delays

- To calculate the number of days between admission and procedure, create a new column (e.g. named "Preop LOS") and subtract the admission date from the procedure date (e.g. =P2-N2). Ensure that the cell format of all the column cells is "general" or "number".
- Excel has a median function that you can use to calculate the median number of days for your CLI cohort. If you have created the new column in column Q and you have 30 patients, the formula would be =MEDIAN(Q2:Q31). You can also find this function under Formulas ⇒ More functions ⇒ Statistical ⇒ MEDIAN.
- You can also calculate the lower quartile and upper quartile of this cohort using the following 2 formulae: =QUARTILE(Q:Q,1) and =QUARTILE(Q:Q,3)
- To calculate the number of patients that meet the 5 day admission to procedure target, you can use the "COUNTIF" function. For the previous example with values in cells Q2 to Q31, the formula would be =COUNTIF(Q2:Q31,"<=5"). You can also find this function under Formulas ⇒ More functions ⇒ Statistical ⇒ COUNTIF. In the new window that appears, type the cell numbers "Q2-Q31" in the Range box, "<=5" in the Criteria Box and click OK.