Prepared by: Jonathan Keeling Date: 22-Sep-2017

Description: This change request includes changes to the Variant QC and Variant Annotation pages in the dashboard and changes to the data loader for the Clinical Hotspot pipeline.

HPS-54: Modify the hotspot data loader so that there is an easily changeable parameter that sets a variant allele frequency cutoff threshold for non-control samples below which any variants will not be loaded. Make the initial setting for this parameter 1% allele frequency.

HPS-55: Add an allele frequency filter text entry box to the Variant QC and Variant Annotation pages in the dashboard. Entering a number into the text box will result in all variants for that sample with allele frequency below that number being hidden from view. The default for this filter will be empty, however the default should be able to be changed in future versions of the dashboard. All variants for a sample, even if they are hidden, must still have a status set besides pending for the sample to be able to move on to the next step in the workflow.

Reason for change: Changes HPS-54 and HPS-55 are requested to reduce unnecessary effort by the clinical directors to review variants below the sensitivity of the test.

Software Changes: This request requires changes to the clinical pipeline, specifically the data loader, and the dashboard, specifically the Variant QC and Variant Annotation pages.

Impact: The expected impact to the codebase of these changes is minor however the risk is high for the following reasons: filtering additional variants at both the data loading step and the quality control/annotation steps in the workflow could result in variants that are missed and un-reviewed by the clinical directors. Additional testing will be added to the performance qualifications to ensure that the proper variants are being filtered at each step.

**Approval**

*Test Scripts have been reviewed and the change has been approved for release to production.*

Business owner/Designee: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

Quality Assurance Review: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

Clinical Lab Director/Designee: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

Dir of Bioinformatics/Designee: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

**Post Go-live**

Implemented by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

Date Changes Implemented: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_