

CHANGES TO THE VMA SYSTEM (July 2016)

Ortho Kinematics is announcing some VMA system upgrades. There will be some **minor yet visible changes to the PDF reports and online VMA portal**. This document is to describe these changes.

See the 96 sec video <https://youtu.be/dO14-6DJBbo>, or continue reading about the **four major changes to the VMA system**.

1. The biggest change is the **addition of disc height** (measured in millimeters) to the standard VMA



report. Also, an alert icon is presented whenever disc height is below a user-defined threshold, which comes defaulted to 5 mm ¹.





See the 90 sec video <https://youtu.be/dO14-6DJBbo>, to see how to enable alerts.

2. Another visible change is that some of the **alert icons have changed**:

OLD



NEW

-  → Potential mal-alignment or excessive motion
-  → Potential borderline mal-alignment or excessive motion
-  → No motion or alignment anomalies
-  → Potential residual motion at a fusion level

3. On the **physician's portal**, the way the alert icons are configured has changed.

OLD

Date	Imaging Event Type	Overall Status
08/12	Cervical	Fusion (C5/C6) Fusion (C6/C7) All other levels:
01/30	Cervical	
01/30	Lumbar	
01/13	Cervical	Fusion (C6/C7) All other levels:
09/11	Lumbar	
09/10	Cervical	Fusion (C4/C5) Fusion (C5/C6) All other levels:

For each patient:

- Different rows for each level that got a fusion
- a row showing instability / alignment alerts for all other levels

NEW

Imaging Event	Alignment & Motion Alerts	Other Alerts
Cervical		
Cervical		
Cervical		
Cervical		
Cervical		

- Mal-alignment, instability, and residual motion alerts all appear in the first column (all on the same row).
- All other alerts in the second column.

¹ Schuler TC1, Burkus JK, Gornet MF, Subach BR, Zdeblick TA. The correlation between preoperative disc space height and clinical outcomes after anterior lumbar interbody fusion. J Spinal Disord Tech. 2005 Oct;18(5):396-401. This threshold can be adjusted by the user at any time on the Prescriber Alerts Configuration page, section D. Miscellaneous Alerts.

4. Within the PDF reports, there are **other small changes**:

- New layout—some of the columns have been moved around and formatting updated to improve readability.
- Alert icons in the data tables show up to the left of the data value (previously on the right).
- When a measurement is very low, the system now identifies these levels with the “LTM” icon (Less than Minimum Threshold Motion), a gray rectangular icon in the lower left of the data cell. Previously, “NCM” text (“No Confirmable Motion”) was displayed in the cell.
- Footnotes have been taken off each page and moved to a separate page at the end of the PDF report package (End Notes).
- The Motion Summary page has been updated such that all alerts for the patient will be displayed on the single landing page for that patient.
 - To this end, a Patient Level Alerts box has been added to top right corner to communicate those alerts which apply to the patient in a more general way.
 - These alerts may include the following, based on the user’s activation profile: Change in VAS (pain), Sagittal Alignment and Overall Segmental Reduced Motion. Greater detail about alert triggers can be found on subsequent report pages.