



ZIMS for Medical Post-Deployment Skills

As a User of ZIMS for Medical you should master the following skills.

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1.How to set Medical Preferences

The first thing you should do is set your Medical Preferences. This will save you time and allows you to customize some of the medical functions in ZIMS. Go to Start > Institution > Institution Preferences or Start > My Preferences. The following topics are available under both Institution Preferences and My Preferences:

- Clinical Notes
 - Set to SOAP or simple Note
 - \circ $\,$ Open the animal care staff summary by default $\,$
- Tests and Results
 - o Set default test units
 - Set default laboratory
- Species360 Template Visibility
 - View Species360 Test Panels
 - View Species360 Favorite Samples



- Single Record Sharing
 - \circ $\;$ Set default institution for sample sharing
- Sample Storage
 - Disable default for most recent sample storage location
- Dashboard Taxonomy
 - o Set dashboard to show Common Name or Scientific Name as default

The following is available only as an Institution Preference:

- Pathology
 - Staff for Alerts
 - o Auto-increment Pathology Case Number
 - Default Examination Location
 - Default Histopathology Location

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2.How to navigate the Medical Dashboard

The ZIMS for Medical dashboard is where you will spend a lot of your time. You should understand the various sections of the dashboard and how to use them. From within an animal record select the Medical Records tab. Or from Start > Medical > Medical Records.

Left hand column Dashboard:

- "Select Animal to see Detail" is where you would search for an animal. If you opened Medical Records from a Husbandry record you would already have the animal in focus and would not have to look for it.
- The funnel icon lets you know what your current date filter is.
- You can use the calendar icon to adjust the date range as desired.
- "Records" displays the various medical modules. By checking and unchecking them you will affect what is displayed in the middle column of the Dashboard. Once a module is unchecked it will also be greyed out.
- Under "Dashboard" at the bottom is where you will find all the searches for data in each medical module. The search filters available will depend on the topic.

Middle column Dashboard

- This is where the results of what you selected on the left column Dashboard are displayed.
- You can choose the order of the display under Animal, Date and Responsible Staff by selecting Group by This Field under the arrows for each column.



• At the bottom the details for the record you have selected at the top are displayed. You can export this area to PDF and Maximize it to view the entire record. You can also Edit and Delete data from here. Depending on what type of record you have selected you may also have other options such as Clone, Terminate and View Sample.

Right hand column Dashboard

- "Basic Info" pulls information from the Husbandry module that may be useful when making medical entries.
- You can quickly view any identifiers the animal has using the Identifiers link.
- You can open the Husbandry record using the GAN hyperlink
- You can add a new weight and update Health Status or Body Condition score from here
- Any Active Problems, Prescriptions/Treatments and Enclosure Treatments display
- You can view and add any Calendar Tasks.

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3.How to use the Medical Resources

The medical resources available are meant to help you interpret your findings or suggest possible solutions. Go to Start > Medical > Medical Resources or Start > Global Resources >Medical Resources.

Anesthesia Summaries – This resource provides a species-level, global-level summary of the most commonly used injectable anesthetic drugs and drug combinations that were recorded as producing anesthesia as the effect of those drugs.

Drug Usage Extracts – This resource allows you to search by Taxonomy, Drug Category and Drug Name. The values are derived from the prescription records entered by the Species360 global member community and are meant to assist with treatment decisions but should not be considered recommendations.

Test Results – This resource is designed to help you interpret your test results and is calculated from the test results entered by Species360 member institutions:

• Search by Test - will find results with as few as less than 15 samples from healthy animals.



• Expected Test Results - This was previously the Global Physiological Reference Intervals. Global Species Reference Intervals are valid references calculated from at least 40 results from healthy animals. Global Basic Statistics contain only 15 – 39 results from healthy animals.

Morbidity and Mortality Analysis -This resource is divided into three selections:

- Most Common Clinical Issues Global search by taxonomy for common medical problems.
- Relevant Death Information Analysis Global, Continent or My Institution search for common causes of death by taxonomy.
- Search by Diagnosis This is a Local only search for Diagnosis Type and Terms.

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4.How to add a new drug to your inventory

Your drug inventory is found under Start > Medical > Pharmacy Inventory. It is recommended to keep an inventory of all your controlled drugs, but all pharmaceutical drugs can be recorded and monitored here.

If it is a controlled drug, make sure you check the Regulated Drug checkbox which makes Regulating Agency and License Holder fields active. For regulated drugs almost all the remaining fields are mandatory on this screen and you can search by most of them. For non-regulated drugs only the Treatment Dictionary Item and Bottle ID are mandatory. As the drug is used, ZIMS will automatically remove the given amount from your inventory.

To record multiple bottles of the same drug, select to Save & Copy. ZIMS will save the record and keep the Add New screen open with the information, all you need to do is record a new Bottle ID #. Save & New will save the record and keep the Add New screen open but with no data entered.

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5.How to use the Dictionaries

ZIMS contains three medical dictionaries. Go to Start > Medical > Dictionary.

- The Term Dictionary drives the choice that you can make in the Diagnosis and Procedures module.
- The Treatment Dictionary drive the choices you can make in the Prescription and Treatment module.



• The Test Dictionary drives the choice you can make in the Tests portion of the Samples/Tests and Results module.

You can add your own Local terms to the Term and Treatment Dictionaries, but not to the Test Dictionary. Local Terms are available for use only by the institution that added them. Sometimes, if enough Users add the same Local term, Species360 will promote it to a Global term for all to use. If this occurs, you will receive a message in your Post Office.

To request a Test be added to ZIMS go to Help Menu > Global Test request, complete the form and submit as directed.

You should practice searching the various Dictionaries to become familiar with their functionality so you will be able to quickly find what you need when the time comes to enter medical records.

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6.How to set Alerts

Having medical Alerts set in your My Calendar can help you manage your workload. There are several ways to get to My Calendar:

- Start > Institution > My Calendar or select the desktop icon. You will need to select the animal for the Alert.
- From the medical dashboard > My Calendar in upper right-hand corner. You will need to select the animal for the Alert even if you have an animal in focus.
- From the medical dashboard with an animal in focus from right hand Basic Info column> Calendar Tasks > Add New Task. The animal will prefill.

There are six types of Alerts that are related to medical needs:

- Medical Procedure
- Animal Assessment Observation
 - An automatic Alert is created for Animal Assessment for the last day of a scheduled treatment or prescription
- Sample Collection
- Prescription Treatment
- Pathology
- Enclosure Treatment Task

Once the Alert has been dealt with remember to Mark Complete. You can hide completed tasks from your calendar view.



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7.How to record samples (including subsamples), tests and results

To record a Sample go to Medical Records > find animal record > New > Sample. When you are recording a Sample, what you select for Sample Type will drive whether some of the other fields in the screen are activated. For example, if you select Sample Type of urine, the Anatomical Source/Tissue is greyed out and not active. If you select Whole Blood, a new grid for Pre-Sampling Conditions is displayed. Once your sample is saved the Calendar Tasks button is activated to schedule collection of future samples.

If multiple types of tests will be run on the sample, you will need to create subsamples. To do this get the sample in focus (left click on it in the middle dashboard) and select the Create Subsample above the details screen at the bottom of the dashboard.

You can request tests from either the left-hand dashboard > New or from the Request Test option above the details box when the original sample is in focus. If you go from the left-hand dashboard all samples for that animal will display. Highlight one and then Select & Continue. If you have created a Test Panel, it can be selected from the dropdown list under Test Requests & Tests Results. Only panels that are valid for the sample type will display here. From the Add New Test function you can add tests one at a time or add tests to the panel.

When your results are back, open the Test Request by either double clicking on the appropriate one in the dashboard, or highlight it and select Edit above the details.

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8.How to search for specific test results

The medical search functionality is found at the bottom of the left-hand dashboard. Selecting Tests & Results allows you to search by a specific animal or an entire taxonomy. The Sample Type is multiple select so you can check as many Types as you want. The Laboratory is a single select and will include any Locally added laboratories.

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9.How to create test panels

New test panels can be created from the Add New Tests & Results or from the Edit screen for a requested Test. Select the gear icon to the right of the Test Panel dropdown then Add New Panel. The name must be unique. The Valid Sample Types are multiple select so be sure to check all that are appropriate so they will display in the Test Panel dropdown to select from. Then add the tests that you want to display in the panel. You can use the Move Up and Move Down arrows to arrange the order of the tests.

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10.How to request a test be added to Universal Test sheet

You cannot add your own Local Test terms to the Test Dictionary. You must request that a new Term be added by Species360. The request form is found under the Help Menu >Medical Topics >Global Test Request. Complete the request form and submit as directed. Species360 will let you know if the request has been accepted and when the Test is added. If the request is declined, you will receive an explanation why it was not accepted.

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11.When to record batch versus multiple prescriptions

A Quick Prescription is for a one-time dose such as a yearly vaccination. You have the option to create a Batch Prescription, meaning each animal listed will receive their own individual treatment. You can use an existing Animal List to select the animals or enter several Local IDs or GANs to select them.

A Full Prescription is for treatment over time such as a course of antibiotics. Here you have the option to select a Single Animal ID or Multiple Animal IDs. Multiple Animal IDs does not mean each animal receives its own individual dose. This is used when the treatment may be scattered over the feed for a herd of animals or added to the water of a flock of birds. The dosage is shared between them.

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12.How to add a laboratory or external contact

To add a laboratory that you use but is not one of the ZIMS Global labs go to Institution > My Institution > Add New. Before adding it is best to check with Species360 to see if the laboratory is in the list and you just aren't finding it. The combination of Institution Name, Institution Category, Institution Type and Country cannot match an existing institution, at least one of those must be different than an existing institution. You can also add a Contact at this institution using the Actions > Add New option in the Contact grid.

If you wish to add an External Contact at another facility such as a Veterinary Advisor or Lab Technician, use the Contact Directory found under My Institution > Contact Directory > Actions > Add New. Several of the medical modules allow you to check External Contact and this name will then appear on that list to select.

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13.How to share medical records

Sharing records allows other institutions to view more than the data viewed Globally. Medical records can be shared by the Medical Admin or, if you are using a custom Role, someone who has access to Medical Records Sharing in the Animals module under Medical Roles. The Species360 Global Admin must first turn Accessibility for External Sharing on for your institution. Your Medical Admin will then activate it under Institution > Institution Preferences > ZIMS Accessibility & Features by selecting the level of sharing desired – Gold, Silver or Bronze. Hover over the "?" to see what medical records are shared at each level. The level of sharing is across all records. The types of records shared/viewed is controlled by the minimum common level of sharing chosen by each institution. For example, if your institution chose to share at the Gold level (all records) and you are sharing with another institution that is sharing at the Bronze level, they will ONLY view your medical records for the Bronze level topics.

Records can be shared from within the animal record in the Husbandry module in the External Sharing grid. You first need to record the institution you will be sharing with and then check the Share Medical Records checkbox.

You can also choose to share from My Institution > External Sharing. You select the institution here, but you also have the option to share a single record or an entire taxonomy.



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14.How to use the Anesthesia Module

There are seven tabs in the Anesthesia module. You must complete the information in the first tab, Basic Info, before the other tabs will become active for data entry. If you select Save & Edit the module will remain open for you to enter data in the other tabs. If you select Save & Close you can come back later to finish the module.

The other tabs are:

- Drugs Given record information about what drugs you used, or add a quick prescription
- Effects & Milestones record the anesthetic depth and milestones
- Samples you do not need to open the Samples module to record any samples collected
- Physiological Measurements record the measurements taken during the anesthesia
- Notes/Comments anything not captured elsewhere
- Recovery & Ratings record the success/failure of the anesthesia including any complications and how the recovery went

If the animal has a Health Status of Normal information entered the data recorded will become part of the Global Resource of Anesthesia Summaries. Because of this it is important that, even though Basic Info is all that is mandatory in this module, the further you complete the other tabs the better the global resource becomes.

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15.How to enter Pathology Information

Pathology data is found in both the Necropsy/Death and the Biopsy modules. To activate the tab in either module you must first complete the Submission tab. Once you save this the Histopathology tab will become active. The data entry screens are the same regardless if you open the screen through the Necropsy/Death or the Biopsy modules.

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16.How to run and use reports

The Medical Reports can be found under the Start menu > Medical > Medical Reports or at the top of the medical dashboard under Medical Reports. You should review all

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of these and try running them so when the time comes you will know which one to use to get the desired information back.

You can create saved filters for all these reports. Saved filters help you save time because you do not have to select the filters you need for frequently run reports. To create a saved filter, open the report screen and complete the filters as desired. Select the Save icon and give the filter a unique name. It will then display in the Favourite Search Filters dropdown list for easy selection and use.

Revised 23 November 2021