Electronic Rodent Colony Management Made Simple

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1 Introduction

In many laboratory animal facilities the task of rodent colony management is the responsibility of the Animal Care Staff (ACS). When commercially available electronic systems are not in place, manual means to create and exchange colony management information (i.e. New Litter Logs, Wean Reports, and Service Requests) can cause excessive paper trails and delays. Having an efficient documentation process in place is crucial to ensure successful colony management. Our program has streamlined the process by creating an electronic New Litter Log form (eNLL) which can easily be implemented in other animal facilities to enhance the service provided to the Principal Investigator (PI), Research Staff, and Veterinarian.

2 Materials

- Laptop with Wi-Fi capability.
- Standardized electronic eNLL PDF form to document colony management information.
- Standardized email format saved as an Outlook Signature to exchange information.
- eNLL email distribution list to include all ACS and Veterinarian.
- Individual lab email distribution lists to include all animal users.
- Electronic eNLL library accessible to ACS, Veterinarian and pertinent lab members.

3 Method

The processes of hand written documentation and manual distribution via mailboxes for New Litter Logs, Wean Reports, and Service Requests, was eliminated. Instead an eNLL form in PDF format was created to facilitate these processes electronically and directly from the animal holding room via laptops (Wi-Fi or Ethernet). This simple PDF form can easily be customized to any site specific needs and processed via any email provider or even integrated into a web application such as SharePoint (Content Management System by Microsoft), which enables additional features on workflow management.

In order to further expedite the distribution of colony management information via the email application, our program has developed standardized eNLL email formats, along with task specific email distribution lists. Potential cost can be documented via the billing portion of the form.

ACS carries a laptop during their daily health rounds and completes the applicable eNLL form for any identified new litters. Reports are sent from the eNLL email distribution list to applicable lab email distribution list. The eNLL is saved in the electronic library as pending until wean date and possible technical service request has been received. According to PI/lab email response, ACS performs technical request and weaning, updates eNLL, submits back to PI/lab and saves in electronic library as completed.

4 Results

Upon implementation, the laboratory animal research program experienced a decrease in additional follow ups needed and a faster response for technical service requests. The rodent colony management flows with greater ease for the ACS, PI, Research Staff, and Veterinarian. Administrative requirements are minimal in order to implement these steps for faster reporting and response. The electronic reporting is also convenient for veterinarians or researchers who are remote or not readily available at all times.

The results are:
(1) ease in reporting, (2) consistency in delivery, (3) remote access via electronic library (4) faster turnaround time, (5) paper reduction, (6) and most importantly, happier animals.

References

Guide for the Care and Use of Laboratory Animals Eighth Edition. Commission on Life Sciences, National Research Council. National Academy Press, Washington DC, 2011.

Acknowledgements

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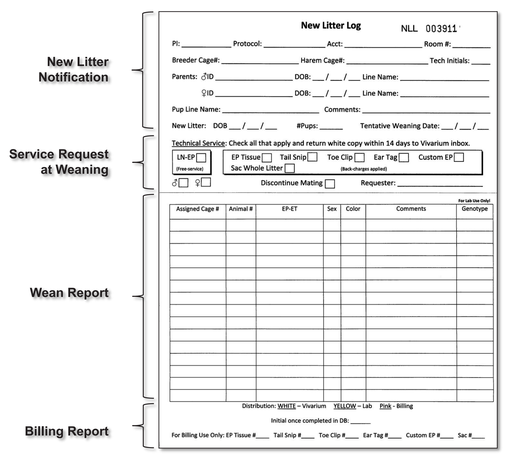
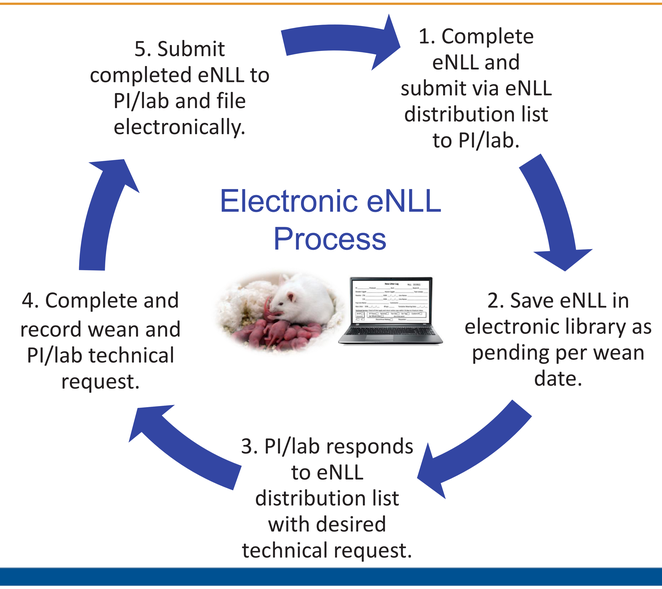
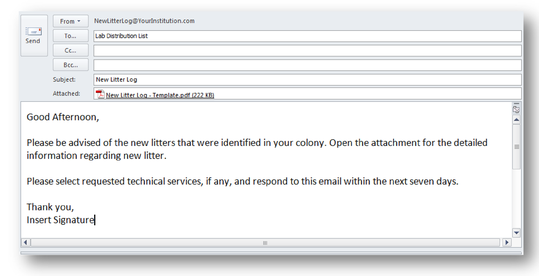
Electronic PDF eNLL Form





Standardized Email Format